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OM protein - protein search, using sw model

Run on: June 7, 2005, 17:45:50 ; Search time 164 Seconds
(without alignment)
1176.789 Million cell updates/sec

Title: US-09-771-956-9

Perfect score: 2616

Sequence: 1 MSFYSKQDYNMDELDYYN.....KQASPVAFKINNDDNEKI 499

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 2105692 seqs, 386760381 residues

Total number of hits satisfying chosen parameters: 2105692

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : A_Geneseq_16Dec04:*

1: Geneseq1980s:*

2: Geneseq1990s:*

3: Geneseq2000s:*

4: Geneseq2001s:*

5: Geneseq2002s:*

6: Geneseq2003as:*

7: Geneseq2003bs:*

8: Geneseq2004s:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match %	Length	DB ID	Description
1	2616	100.0	499	4 AAE08004	Aae08004 Human chi
2	2616	100.0	499	5 ABG32254	Abg32254 Neuropept
3	2326	88.9	455	2 AAR95939	Aar95939 Human Y5
4	2326	88.9	455	2 AAW29447	Aaw29447 Human hip
5	2326	88.9	455	2 AAW29413	Aaw29413 Human hip
6	2326	88.9	455	2 AAW37093	Aaw37093 Homo sapi
7	2326	88.9	455	2 AAY57461	Aay57461 Human hip
8	2326	88.9	455	4 AAE08002	Aae08002 Human neu
9	2326	88.9	455	5 ABB84497	Abb84497 Human hip
10	2326	88.9	455	5 ABB79510	Abb79510 Human neu
11	2326	88.9	455	6 AAO23266	Aao23266 Human neu
12	2326	88.9	455	8 ADO29564	Ado29564 Human GPC
13	2317	88.6	455	4 AAE08016	Aae08016 African g
14	2285.5	87.4	499	4 AAE08012	Aae08012 Rat chime
15	2276.5	87.0	508	4 AAE08010	Aae08010 Mouse chi
16	2271	86.8	445	2 AAW27604	Aaw27604 Human neu
17	2271	86.8	445	2 AAW15230	Aaw15230 Human neu
18	2271	86.8	445	2 AAY14554	Aay14554 Human neu
19	2271	86.8	445	3 AAY52578	Aay52578 Human NPY
20	2271	86.8	445	4 AAE07958	Aae07958 Human neu
21	2271	86.8	445	4 AAE06692	Aae06692 Human neu
22	2271	86.8	445	4 AAE07922	Aae07922 Human neu
23	2271	86.8	445	4 AAB85121	Aab85121 Human neu
24	2271	86.8	445	4 AAB85110	Aab85110 Human neu
25	2271	86.8	445	6 ABB81860	Abb81860 Human neu

26	2271	86.8	445	7 ADN39350	Adn39350 Cancer/an
27	2262	86.5	445	4 AAE02851	Aae02851 Rhesus ne
28	2262	86.5	445	4 ABB56370	Abb56370 Non-endog
29	2212	84.6	456	2 AAW37095	Aaw37095 Canis dom
30	2207	84.4	445	3 AAY52577	Aay52577 Chimeric
31	2036.5	77.8	456	2 AAR95940	Aar95940 Rat Y5 re
32	2036.5	77.8	456	2 AAW29446	Aaw29446 Rat hypot
33	2036.5	77.8	456	2 AAW29412	Aaw29412 Rat hypot
34	2036.5	77.8	456	2 AAW37092	Aaw37092 Rattus no
35	2036.5	77.8	456	2 AAY57460	Aay57460 Rat hypot
36	2036.5	77.8	456	5 ABB84496	Abb84496 Rat hypot
37	2036.5	77.5	445	2 AAW27603	Aaw27603 Rat neuro
38	2036.5	77.5	445	2 AAY14553	Aay14553 Rat neuro
39	2036.5	77.5	445	3 AAY52579	Aay52579 Rat NPY (
40	2026	77.4	466	2 AAW15233	Aaw15233 Mouse neu
41	2024.5	77.4	445	2 AAW15232	Aaw15232 Rat neuro
42	2022	77.3	466	8 ADO29565	Ado29565 Mouse GPC
43	2019.5	77.2	445	2 AAW27602	Aaw27602 Rat neuro
44	2019.5	77.2	445	2 AAY14552	Aay14552 Rat neuro
45	1899.5	72.6	394	4 AAE08005	Aae08005 Human chi

ALIGNMENTS

RESULT 1
AAE08004
ID AAE08004 standard; protein; 499 AA.
XX AAE08004;
AC AAE08004;
XX
DT 01-NOV-2001 (first entry)
XX
DE Human chimeric NPY5deltaY1CT receptor.
XX
KW Neuropeptide Y; NPY receptor; G-protein-coupled transmembrane protein;
transmembrane; TM domain; therapy; obesity; blood pressure; epilepsy;
Huntington's disorder; Parkinson's disorder; eating disorder; seizure;
locomotor; anxiety disorder; limbic seizure; tranquiliser; human;
chimeric receptor.
XX
OS Homo sapiens.
XX
PN WO200155103-A2.
XX
PD 02-AUG-2001.
XX
PF 29-JAN-2001; 2001WO-US002804.
XX
PR 28-JAN-2000; 2000US-0178652P.
XX
PA (NEUR-) NEUROGEN CORP.
XX
PI Bennett M, Brodbeck R, Krause J;
XX
DR WPI; 2001-514543/56.
XX
DR N-PSDB; RAD14736.
XX
PT New chimeric receptor proteins comprising a single polypeptide chain of
amino acids, useful as targets for drug actions, and as basis for drug
discovery and development.
XX
PS Claim 11; Page 51-53; 72pp; English.
XX

CC The present invention relates to chimeric neuropeptide Y (NPY) receptors.
The NPY receptors are G-protein-coupled transmembrane proteins with seven
membrane spanning transmembrane (TM) domains. The compounds that modulate
the activity of a NPY receptor is useful in the preparation of a
medicament for treating conditions including obesity, high/low blood
pressure, epilepsy, Huntington's and Parkinson's disorder and eating,
seizure, locomotor and anxiety disorders. They can also be used as
targets for drug actions, and as basis for drug discovery and
development. The NPY5 receptor may have an anti-epileptic activity in the

CC control of limbic seizures. The present sequence is human chimeric
 CC NP5deltaV1CT receptor. The chimera comprises C-terminal intracellular
 CC domain of NP5 receptor replaced with C-terminal intracellular domain of
 CC NPY1 receptor

XX
 XX
 SQ Sequence 499 AA;

Query Match 100.0%; Score 2616; DB 4; Length 499;
 Best Local Similarity 100.0%; Pred. No. 7.6e-259;
 Matches 499; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MSFYKQDYNMDELDEYNNKTLATENNNTAATRNDFPVWDDYKSSVDDQLQYFLIGLYTF 60
 DB 1 MSFYKQDYNMDELDEYNNKTLATENNNTAATRNDFPVWDDYKSSVDDQLQYFLIGLYTF 60
 QY 61 VSLGFMGNLLILMALMKRKNQKTVNPLGNLAFSDILVLFCSPTLTSLVLDQWQMG 120
 DB 61 VSLGFMGNLLILMALMKRKNQKTVNPLGNLAFSDILVLFCSPTLTSLVLDQWQMG 120
 QY 121 KVMCHIMPFLQCVSLVSTLILISIAIVRYHMKHPISNNLTANHGYFLIATVTLGFAI 180
 DB 121 KVMCHIMPFLQCVSLVSTLILISIAIVRYHMKHPISNNLTANHGYFLIATVTLGFAI 180
 QY 181 CSPLPVPHSLVELQETFGSALLSSRYLCSVSWPSDSYRIATFTISLLVQVILPLVCLTVS 240
 DB 181 CSPLPVPHSLVELQETFGSALLSSRYLCSVSWPSDSYRIATFTISLLVQVILPLVCLTVS 240
 QY 241 HTSVCRISICGLSKNENRLEENENINLTLPKSKGQVQLSGHKWSYFIKHHRRYS 300
 DB 241 HTSVCRISICGLSKNENRLEENENINLTLPKSKGQVQLSGHKWSYFIKHHRRYS 300
 QY 301 KKTACVLPAPEPQENHSRILPENFGSVRSQSSSKFIPGVPTCFEIKPEENSDVHEL 360
 DB 301 KKTACVLPAPEPQENHSRILPENFGSVRSQSSSKFIPGVPTCFEIKPEENSDVHEL 360
 QY 361 RVKRSVTRIKKRSRVFYRLTILVFAVSMPLHLPHVTVTFDNDNLISNRHFKLVYIC 420
 DB 361 RVKRSVTRIKKRSRVFYRLTILVFAVSMPLHLPHVTVTFDNDNLISNRHFKLVYIC 420
 QY 421 HLLGMMSCCLNPILYGLFNNGIQRDLOFPNFCDFRSRDDYDIETIAMSTWHTDVKTSLK 480
 DB 421 HLLGMMSCCLNPILYGLFNNGIQRDLOFPNFCDFRSRDDYDIETIAMSTWHTDVKTSLK 480
 QY 481 QASPVAFKKNNDNEKI 499
 DB 481 QASPVAFKKNNDNEKI 499

RESULT 2

ID ABG32254 standard; protein; 499 AA.

XX AC ABG32254;

XX DT 24-OCT-2002 (first entry)

XX DE Neuropeptide Y5/Y1 chimera.

XX KW Y5/Y1; carbazole derivative; neuropeptide Y-5; neurotransmission;
 KW heart failure; shock; cardiac hypertrophy; increased blood pressure;
 KW angina; myocardial infarction; renal failure; cerebral disease;
 KW neurodegeneration; epilepsy; stroke; depression; anxiety; schizophrenia;
 KW dementia; Crohn's disease; hypercholesterolaemia; hyperlipidemia;
 KW arteriosclerosis; anorexia; reproductive disorder; inflammatory disorder;
 KW respiratory disease; asthma; bronchoconstriction.

XX OS Homo sapiens.

OS OS Synthetic.

OS OS Chimeric.

XX XX Key Location/Qualifiers

FT Region 1.442

FT /label= Human Y-5 receptor fragment

FT Region 443.499
 FT /note= "Human Y-1 receptor fragment"

XX US6399631-B1.

XX 04-JUN-2002.

XX 21-JUL-2000; 2000US-00620315.

XX 23-JUL-1999; 99US-0145304P.

XX (PFIZ) PFIZER INC.

XX Elliott RL, Griffith DA, Hammond M;

XX WPI; 2002-588639/63.

XX N-PSDB; ABK91148.

XX New carbazole derivatives are neuropeptide Y-5 antagonists, useful for
 PT treating e.g. obesity, heart disease, central nervous system disorders,
 PT epilepsy and eating disorders.

XX Disclosure; Col 21-24; 46pp; English.

XX This invention relates to novel carbazole derivatives which may be used
 CC to treat conditions associated with neuropeptide Y-5 neurotransmission.
 CC The carbazole derivatives of the invention may be used as NY-5
 CC antagonists. The carbazole derivatives may be used for treating obesity
 CC and disorders arising from neuropeptide Y neurotransmission in dogs, cats
 CC and humans. They can be used to inhibit or alleviate conditions selected
 CC from: diseases or disorders pertaining to the heart, blood vessels or the
 CC renal system, such as heart failure, shock, cardiac hypertrophy,
 CC increased blood pressure, angina, myocardial infarction, peripheral
 CC vascular diseases and abnormal renal conditions such as impaired flow of
 CC fluid, abnormal mass transport and renal failure; conditions related to
 CC increased sympathetic nerve activity (e.g. during or after operations and
 CC surgery); cerebral diseases and diseases related to the CNS (e.g.
 CC neurodegeneration, epilepsy, stroke, depression, anxiety, schizophrenia
 CC and dementia), conditions related to pain or nociception, diseases
 CC related to abnormal gastrointestinal motility and secretion (e.g.
 CC different forms of ileus, urinary incontinence and Crohn's diseases),
 CC lipid-related disorders (including hypercholesterolaemia, hyperlipidemia
 CC and arteriosclerosis), abnormal drink and food intake disorders (e.g.
 CC anorexia, and metabolic disorders, diseases related to sexual dysfunction
 CC and reproductive disorders), inflammatory disorders, respiratory diseases
 CC (e.g. asthma and conditions related to asthma and bronchoconstriction),
 CC and diseases related to abnormal hormone releases (such as leutinising
 CC hormone, growth hormone, insulin and prolactin). The present sequence
 CC represents the Y5/Y1 chimeric protein used in an assay for neuropeptide Y
 CC (NPY) binding in the specification

XX SQ Sequence 499 AA;

Query Match 100.0%; Score 2616; DB 5; Length 499;

Best Local Similarity 100.0%; Pred. No. 7.6e-259;

Matches 499; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MSFYKQDYNMDELDEYNNKTLATENNNTAATRNDFPVWDDYKSSVDDQLQYFLIGLYTF 60

DB 1 MSFYKQDYNMDELDEYNNKTLATENNNTAATRNDFPVWDDYKSSVDDQLQYFLIGLYTF 60

QY 61 VSLGFMGNLLILMALMKRKNQKTVNPLGNLAFSDILVLFCSPTLTSLVLDQWQMG 120

DB 61 VSLGFMGNLLILMALMKRKNQKTVNPLGNLAFSDILVLFCSPTLTSLVLDQWQMG 120

QY 121 KVMCHIMPFLQCVSLVSTLILISIAIVRYHMKHPISNNLTANHGYFLIATVTLGFAI 180

DB 121 KVMCHIMPFLQCVSLVSTLILISIAIVRYHMKHPISNNLTANHGYFLIATVTLGFAI 180

QY 181 CSPLPVPHSLVELQETFGSALLSSRYLCSVSWPSDSYRIATFTISLLVQVILPLVCLTVS 240

DB 181 CSPLPVPHSLVELQETFGSALLSSRYLCSVSWPSDSYRIATFTISLLVQVILPLVCLTVS 240

QY 241 HTSVCRSISCGLSNKENLEENEMINLTLPSPKSGPQVKLSGSHKWSYFIKKHRRYS 300
Db 241 HTSVCRSISCGLSNKENLEENEMINLTLPSPKSGPQVKLSGSHKWSYFIKKHRRYS 300
QY 301 KKTACVLPAPEPSPQENHSRILPENFGSVRSQSSSKFIPGVPTCFEIKPEENSVDVHEL 360
Db 301 KKTACVLPAPEPSPQENHSRILPENFGSVRSQSSSKFIPGVPTCFEIKPEENSVDVHEL 360
QY 361 RVKRSVTRIKKRSRVFVRLTILILVFAVSWMPLHLFHVVTDFNDNLISNRHFKLVYCIC 420
Db 361 RVKRSVTRIKKRSRVFVRLTILILVFAVSWMPLHLFHVVTDFNDNLISNRHFKLVYCIC 420
QY 421 HLLGWMSCCLNPILYGFNLNGIQDLQFFNFCDFRSDDDDDYETIAMSTMHTDVSLSLK 480
Db 421 HLLGWMSCCLNPILYGFNLNGIQDLQFFNFCDFRSDDDDDYETIAMSTMHTDVSLSLK 480
QY 481 QASPVAFKKINNDNEKI 499
Db 481 QASPVAFKKINNDNEKI 499

RESULT 3

AAR95939

ID AAR95939 standard; protein; 455 AA.

AC AAR95939;

XX 14-OCT-1996 (first entry)

DT Human Y5 receptor.

DE Y5 receptor; atypical neuropeptide Y1 receptor; feeding behavior;

XX G protein-coupled receptor; agonist; antagonist; obesity; bulimia;

XX anorexia; transgenic animal.

XX Homo sapiens.

OS Key

PH Location/Qualifiers

FT 51..77

FT /label= I

FT /note= "transmembrane domain I"

FT 88..110

FT /label= II

FT /note= "transmembrane domain II"

FT 126..147

FT /label= III

FT /note= "transmembrane domain III"

FT 166..187

FT /label= IV

FT /note= "transmembrane domain IV"

FT 220..242

FT /label= V

FT /note= "transmembrane domain V"

FT 380..403

FT /label= VI

FT /note= "transmembrane domain VI"

FT 416..438

FT /label= VII

FT /note= "transmembrane domain VII"

XX WO9616542-A1.

PN 06-JUN-1996.

PD 01-DEC-1995; 95WO-US015646.

XX 02-DEC-1994; 94US-00349025.

XX (SYNA-) SYNAPTIC PHARM CORP.

PA Gerald CPG, Walker MW, Branchek T, Weinehank RL;

XX WPI; 1996-277371/28.

DR

DR N-PSDB; AAT30433.
XX Modifying feeding behaviour using Y5 receptor (ant)agonists - increases
PT or decreases food consumption, for treatment of e.g. obesity or bulimia.
XX Claim 51; Fig 6; 235pp; English.
XX Human hippocampal Y5 receptor (AAR95939) was identified as the homologue
CC of rat hypothalamic Y5 receptor (AAR95940), isolated as an 'atypical Y1
CC receptor'. The receptor belongs to the G protein-coupled receptor
CC superfamily. It is encoded by a cDNA clone (see also AAT30433) that was
CC isolated from a hippocampus cDNA library using rat Y5 receptor cDNA as
CC probe. Recombinant rat Y5 receptor can be produced in prokaryotic or
CC eukaryotic (e.g. COS, 293 or Sf9 insect) host cells. It is used to
CC identify Y5 ligands (agonists and antagonists) that can be used to treat
CC obesity, bulimia or anorexia, and to raise monoclonal antibodies useful
CC in detecting Y5 receptor
XX
SQ Sequence 455 AA;

Query Match 88.9%; Score 2326; DB 2; Length 455;
Best Local Similarity 99.6%; Pred. No. 3.7e-229;
Matches 444; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 1 MSFYSKQDYNMDLEDEYNNKTATENNATATRSDFPVDYKSSVDLQYFLIGLYTF 60

Db 1 MSFYSKQDYNMDLEDEYNNKTATENNATATRSDFPVDYKSSVDLQYFLIGLYTF 60

QY 61 VSLGFGMGNLLILMALMKRNQKTTNPLIGNLAFSDILVLPSPFTLTSLVLDQWMPG 120

Db 61 VSLGFGMGNLLILMALMKRNQKTTNPLIGNLAFSDILVLPSPFTLTSLVLDQWMPG 120

QY 121 KVMCHIMPFLQCVSVLSTLLISIAIVRYHMIKHPISNNLTANHGYFLIATVTLGFAI 180

Db 121 KVMCHIMPFLQCVSVLSTLLISIAIVRYHMIKHPISNNLTANHGYFLIATVTLGFAI 180

QY 181 CSPLPVFHSLVELQETFGSALLSSRYLCVESWSPDSYRIAFITISLLVQYILPLVCLTVS 240

Db 181 CSPLPVFHSLVELQETFGSALLSSRYLCVESWSPDSYRIAFITISLLVQYILPLVCLTVS 240

QY 241 HTSVCRSISCGLSNKENLEENEMINLTLPSPKSGPQVKLSGSHKWSYFIKKHRRYS 300

Db 241 HTSVCRSISCGLSNKENLEENEMINLTLPSPKSGPQVKLSGSHKWSYFIKKHRRYS 300

QY 301 KKTACVLPAPEPSPQENHSRILPENFGSVRSQSSSKFIPGVPTCFEIKPEENSVDVHEL 360

Db 301 KKTACVLPAPEPSPQENHSRILPENFGSVRSQSSSKFIPGVPTCFEIKPEENSVDVHEL 360

QY 361 RVKRSVTRIKKRSRVFVRLTILILVFAVSWMPLHLFHVVTDFNDNLISNRHFKLVYCIC 420

Db 361 RVKRSVTRIKKRSRVFVRLTILILVFAVSWMPLHLFHVVTDFNDNLISNRHFKLVYCIC 420

QY 421 HLLGWMSCCLNPILYGFNLNGIQDL 446.

Db 421 HLLGWMSCCLNPILYGFNLNGIKADL 446

RESULT 4

AAW29447

ID AAW29447 standard; protein; 455 AA.

XX AAW29447;

AC 25-MAR-2003 (revised)

DT 26-FEB-1998 (first entry)

XX Human hippocampal neuropeptide Y Y5 receptor.

XX Hippocampal; neuropeptide Y Y5 receptor; NPY Y5; antagonist;

XX epileptic seizure; migraine; sleep disturbance; prophylaxis;

XX eating disorder; quiazolin-2,4-diazirine.

XX Homo sapiens.

OS

QY 121 KVMCHIMPFLQCVSLVSTLILISIAIVRYHMIKHPISNNLTANHGYFLIATVMTLGFAL 180
DB 121 KVMCHIMPFLQCVSLVSTLILISIAIVRYHMIKHPISNNLTANHGYFLIATVMTLGFAL 180
QY 181 CSPLPVFHSILVELQETFGSALLSSRYLCVESWPSDSYRIAFITISLLLVQYILPLVCLTVS 240
DB 181 CSPLPVFHSILVELQETFGSALLSSRYLCVESWPSDSYRIAFITISLLLVQYILPLVCLTVS 240
QY 241 HTSVCRSISCGLSNKENLEENEMINLTLPSPKSGPOVKLSGSHKWSYFIKKHRRYS 300
DB 241 HTSVCRSISCGLSNKENLEENEMINLTLPSPKSGPOVKLSGSHKWSYFIKKHRRYS 300
QY 301 KKTACVLPAPEPSPQENHSRILPENFGSVRSQSSSKFIPGVPTCFPIKPEENSVDVHEL 360
DB 301 KKTACVLPAPEPSPQENHSRILPENFGSVRSQSSSKFIPGVPTCFPIKPEENSVDVHEL 360
QY 361 RVKESVTRIKKRSRVFRLTILILVFAVSWMPLHLFHVVTDFNDNLISNRHFKLVYCIC 420
DB 361 RVKESVTRIKKRSRVFRLTILILVFAVSWMPLHLFHVVTDFNDNLISNRHFKLVYCIC 420
QY 421 HLLGWMSCCLNPILYGLFNNGIQORDL 446
DB 421 HLLGWMSCCLNPILYGLFNNGIKADL 446

RESULT 6
AAW37093
ID AAW37093 standard; protein; 455 AA.

AC AAW37093;
XX
XX
DT 08-JUN-1998 (first entry)
XX
DE Homo sapiens hippocampal Y5 receptor.
XX
KW Hippocampal Y5 receptor; treatment; anorexia; bulimia; obesity;
KW feeding behaviour; modification; atypical neuropeptide.
XX
OS Homo sapiens.
XX
XX WO9746250-A1.
XX
PD 11-DEC-1997.
XX
XX 04-JUN-1997; 97WO-US009504.
XX
XX 04-JUN-1996; 96US-0068650.
XX
XX 21-FEB-1997; 97US-00803600.
XX
XX (SYNA-) SYNAPTIC PHARM CORP.
XX
XX Gerald CP, Weinshank RL, Walker MW, Branchek T;
XX
XX WPI; 1998-051901/05.
XX
XX N-ESDB; AAV00622.

DNA encoding canine hypothalamic atypical neuro:peptide Y/peptide YY
receptor, Y5 - useful for identification of compounds which are capable
of modifying feeding behaviour.
XX
XX Disclosure; Fig 6; 273pp; English.
XX
XX The sequence is that of a hippocampal Y5 receptor (Y5-R). Y5-R can be
used in processes to determine whether a chemical compound specifically
binds to and activates or inhibits a Y5-R by measuring a second messenger
response. The chemical compounds can be used to increase or reduce the
activity of a Y5-R. In particular, inhibitors can be used to treat
obesity and activators can be used to treat anorexia. Antagonists capable
of alleviating (by decreasing the activity of Y5-R) an abnormality can be
identified by administering a potential antagonist to a transgenic mammal
as above, and determining whether the substance alleviates the physical
and behavioural abnormalities displayed by the transgenic mammal as a
result of overactivity of a Y5-R. Agonists can be identified in a similar

CC manner, but where the abnormality is alleviated by increasing the
CC activity of Y5-R
XX
SQ Sequence 455 AA;
Query Match 88.9%; Score 2326; DB 2; Length 455;
Best Local Similarity 99.6%; Pred. No. 3.7e-229;
Matches 444; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
QY 1 MSFYSKQDYNMDLEDEYNTKTLATENNTAATRSNDFPVDYKSSVDDLOVFLIGLYTF 60
DB 1 MSFYSKQDYNMDLEDEYNTKTLATENNTAATRSNDFPVDYKSSVDDLOVFLIGLYTF 60
QY 61 VSLGFGMGNLLILMALMKRNQKTTVNFILGNLAFSDILVVLFCSPFTLTSLVLDQWFG 120
DB 61 VSLGFGMGNLLILMALMKRNQKTTVNFILGNLAFSDILVVLFCSPFTLTSLVLDQWFG 120
QY 121 KVMCHIMPFLQCVSLVSTLILISIAIVRYHMIKHPISNNLTANHGYFLIATVMTLGFAL 180
DB 121 KVMCHIMPFLQCVSLVSTLILISIAIVRYHMIKHPISNNLTANHGYFLIATVMTLGFAL 180
QY 181 CSPLPVFHSILVELQETFGSALLSSRYLCVESWPSDSYRIAFITISLLLVQYILPLVCLTVS 240
DB 181 CSPLPVFHSILVELQETFGSALLSSRYLCVESWPSDSYRIAFITISLLLVQYILPLVCLTVS 240
QY 241 HTSVCRSISCGLSNKENLEENEMINLTLPSPKSGPOVKLSGSHKWSYFIKKHRRYS 300
DB 241 HTSVCRSISCGLSNKENLEENEMINLTLPSPKSGPOVKLSGSHKWSYFIKKHRRYS 300
QY 301 KKTACVLPAPEPSPQENHSRILPENFGSVRSQSSSKFIPGVPTCFPIKPEENSVDVHEL 360
DB 301 KKTACVLPAPEPSPQENHSRILPENFGSVRSQSSSKFIPGVPTCFPIKPEENSVDVHEL 360
QY 361 RVKESVTRIKKRSRVFRLTILILVFAVSWMPLHLFHVVTDFNDNLISNRHFKLVYCIC 420
DB 361 RVKESVTRIKKRSRVFRLTILILVFAVSWMPLHLFHVVTDFNDNLISNRHFKLVYCIC 420
QY 421 HLLGWMSCCLNPILYGLFNNGIQORDL 446
DB 421 HLLGWMSCCLNPILYGLFNNGIKADL 446
RESULT 7
AAW57461
ID AAW57461 standard; protein; 455 AA.
XX
XX AAW57461;
XX
XX 25-FEB-2000 (first entry)
XX
XX Human hippocampal Y5 receptor.
XX
XX Y5 receptor; feeding behaviour; food consumption; obesity; bulimia;
XX anorexia; neuropeptide; genetic engineering.
XX
XX Homo sapiens.
XX
XX US5968819-A.
XX
XX 19-OCT-1999.
XX
XX 01-DEC-1995; 95US-00566096.
XX
XX 02-DEC-1994; 94US-00349025.
XX
XX (SYNA-) SYNAPTIC PHARM CORP.
XX
XX Walker MW, Branchek T, Gerald CPG, Weinshank RL;
XX WPI; 1999-590415/50.
XX
XX N-ESDB; AAZ39046.
XX
XX Nucleic acid encoding a human neuropeptide Y receptor useful in genetic

PT	engineering.	
XX	Disclosure; Fig 6; 87pp; English.	
XX	The present sequence represents the human hippocampal Y5 receptor. The Y5	
CC	receptor is a G-protein coupled neurotensin Y receptor found throughout	
CC	the mammalian nervous system and is a powerful stimulant of feeding	
CC	behaviour. Cells expressing DNA encoding the Y5 receptor can be used to	
CC	determine whether a ligand specifically binds to a Y5 receptor. These	
CC	cells or a cell extract, is exposed to the ligand and then any binding	
CC	between the ligand and the receptor can be detected. The cells can also	
CC	be used to determine whether a ligand is a Y5 receptor antagonist or	
CC	agonist. The binding of chemical compounds to a Y5 receptor can also	
CC	determined and whether they activate or inhibit the activation of the Y5	
CC	receptor can also be determined using cells expressing the receptor. The	
CC	effect of drugs on the Y5 receptor and whether they act as agonists or	
CC	antagonists can also be detected with these cells	
XX		
SQ	Sequence 455 AA;	
	Query Match 88.9%; Score 2326; DB 2; Length 455;	
	Best Local Similarity 99.6%; Pred. No. 3.7e-229;	
	Matches 444; Conservative 1; Mismatches 1; Indels 0; Gaps 0;	
Qy	1 MSFYSKDYNDMDLEDEYNNKTLATENTTAATRNDFPVWDDYKSSVDDLYQFLIGLYTF 60	
Db		
Qy	1 MSFYSKDYNDMDLEDEYNNKTLATENTTAATRNDFPVWDDYKSSVDDLYQFLIGLYTF 60	
Db		
Qy	61 VSLGFGNLLILMALMKRNQKTTNVNLFNLGNLAFSDILVLFCSPPFTLSVLLDQWFG 120	
Db		
Qy	121 KVMCHIMPFLQCVSVLSTLILISIAIVRHMKIPISNNLTANHGYFLIATVMTLGFAL 180	
Db		
Qy	121 KVMCHIMPFLQCVSVLSTLILISIAIVRHMKIPISNNLTANHGYFLIATVMTLGFAL 180	
Db		
Qy	181 CSPLPVFSHSLVQLQETFGSALLSRYLCVSWPSDSYRIAFITSLLLVQVILPLVCLTVS 240	
Db		
Qy	181 CSPLPVFSHSLVQLQETFGSALLSRYLCVSWPSDSYRIAFITSLLLVQVILPLVCLTVS 240	
Db		
Qy	241 HTSVCRSISCGLSNKENLEENEMINLTLPKSKSGQVQLSGSHKWSYFIKRRRYS 300	
Db		
Qy	241 HTSVCRSISCGLSNKENLEENEMINLTLPKSKSGQVQLSGSHKWSYFIKRRRYS 300	
Db		
Qy	301 KKTACVLPAPERPSQENHNRILPENFGSVRSQSSSKFIPGVPTCTPEIKPEENSVDHEL 360	
Db		
Qy	301 KKTACVLPAPERPSQENHNRILPENFGSVRSQSSSKFIPGVPTCTPEIKPEENSVDHEL 360	
Db		
Qy	361 RVKRSVTRIKRSRSVYRITLILVFAVSWMPHLHFVHTVDFDNDNLISNRHFKLVYCIC 420	
Db		
Qy	361 RVKRSVTRIKRSRSVYRITLILVFAVSWMPHLHFVHTVDFDNDNLISNRHFKLVYCIC 420	
Db		
Qy	421 HLLGMMSCCLNPILYGLFNNGIQRDL 446	
Db		
Qy	421 HLLGMMSCCLNPILYGLFNNGIQRDL 446	
Db		
RESULT 8		
AAE08002		
ID	AAE08002 standard; protein; 455 AA.	
XX		
AC	AAE08002;	
XX		
DT	01-NOV-2001 (first entry)	
XX		
DE	Human neuropeptide Y5 (NPY5) receptor.	
XX		
KW	Neuropeptide Y: NPY receptor; G-protein-coupled transmembrane protein;	
KW	transmembrane; TM domain; therapy; obesity; blood pressure; epilepsy;	
KW	Huntington's disorder; Parkinson's disorder; eating disorder; seizure;	
KW	locomotor; anxiety disorder; limbic seizure; tranquiliser; human.	
OS	Homo sapiens.	

XX	Key	Location/Qualifiers
PH	Domain	1..50 /note= "N-terminal extracellular domain"
FT	Domain	51..71 /note= "First TM domain"
FT	Domain	72..84 /note= "First intracellular loop domain"
FT	Domain	85..105 /note= "Second TM domain"
FT	Domain	106..125 /note= "First extracellular loop domain"
FT	Domain	126..146 /note= "Third TM domain"
FT	Domain	147..167 /note= "Second intracellular loop domain"
FT	Domain	168..188 /note= "Fourth TM domain"
FT	Domain	189..220 /note= "Second extracellular loop domain"
FT	Domain	221..241 /note= "Fifth TM domain"
FT	Domain	242..378 /note= "Third intracellular loop domain"
FT	Domain	379..401 /note= "Sixth TM domain"
FT	Domain	402..414 /note= "Third extracellular loop domain"
FT	Domain	415..438 /note= "Seventh TM domain"
FT	Domain	439..455 /note= "C-terminal intracellular domain"
XX	WO200155103-A2.	
PN	02-AUG-2001.	
XX	29-JAN-2001; 2001WO-US002804.	
XX	28-JAN-2000; 2000US-0178652P.	
PR	(NEUR-) NEUROGEN CORP.	
XX	Bennett M, Brodbeck R, Krause J;	
PI	WPI; 2001-514543/56.	
XX	N-PSDB; AAD14734.	
DR	New chimeric receptor proteins comprising a single polypeptide chain of	
XX	amino acids, useful as targets for drug actions, and as basis for drug	
PT	discovery and development.	
XX	Example 2; Page 55-56; 72pp; English.	
PS	The present invention relates to chimeric neuropeptide Y (NPY) receptors.	
XX	The NPY receptors are G-protein-coupled transmembrane proteins with seven	
CC	membrane spanning transmembrane (TM) domains. The compounds that modulate	
CC	the activity of a NPY receptor is useful in the preparation of a	
CC	medicament for treating conditions including obesity, high/low blood	
CC	pressure, epilepsy, Huntington's and Parkinson's disorder and eating,	
CC	seizure, locomotor and anxiety disorders. They can also be used as	
CC	targets for drug actions, and as basis for drug discovery and	
CC	development. The NPY5 receptor may have an anti-epileptic activity in the	
CC	control of limbic seizures. The present sequence is human NPY5 receptor	
XX	Sequence 455 AA;	
SQ	Query Match 88.9%; Score 2326; DB 4; Length 455;	
	Best Local Similarity 99.6%; Pred. No. 3.7e-229;	
	Matches 444; Conservative 1; Mismatches 1; Indels 0; Gaps 0;	
Qy	1 MSFYSKDYNDMDLEDEYNNKTLATENTTAATRNDFPVWDDYKSSVDDLYQFLIGLYTF 60	

Db 1 MSFYSKQDYNMDLEDEYNNKTATENNNTAATRNDFPFWDDYKSSVDDQLQVFLGLTYF 60
QY 61 VSLGFMGNLLILMALMKRNQKTTVNFILGNLAFSDILVLFCSPPFTLTSLVLLDQWFG 120
Db 61 VSLGFMGNLLILMALMKRNQKTTVNFILGNLAFSDILVLFCSPPFTLTSLVLLDQWFG 120
QY 121 KVMCHIMPFLQCVSVLVSTLILISIAIVRYHMIKHPISNNLTANHGYFLIATVWTLGPAI 180
Db 121 KVMCHIMPFLQCVSVLVSTLILISIAIVRYHMIKHPISNNLTANHGYFLIATVWTLGPAI 180
QY 181 CSPLPVFHSVLVELQTFGSALLSSRYLCVESWPSDSYRIAFITISLLVQYILPLVCLTVS 240
Db 181 CSPLPVFHSVLVELQTFGSALLSSRYLCVESWPSDSYRIAFITISLLVQYILPLVCLTVS 240
QY 241 HTSVCRSISCGLSNKENLEENEMINTLHPKSKGPOVKLSGSHKWSYFIKKHRRYS 300
Db 241 HTSVCRSISCGLSNKENLEENEMINTLHPKSKGPOVKLSGSHKWSYFIKKHRRYS 300
QY 301 KKTACVLPAPERPSQENHSRILPENFGSVRSQSSSKFIPGVPTCFEIKPEENSVDVHEL 360
Db 301 KKTACVLPAPERPSQENHSRILPENFGSVRSQSSSKFIPGVPTCFEIKPEENSVDVHEL 360
QY 361 RVKRSVTRIKKRSRSVFYRLTILILVFAVSWMPLHLPHVVTDFNDNLISNRHFKLVYCIC 420
Db 361 RVKRSVTRIKKRSRSVFYRLTILILVFAVSWMPLHLPHVVTDFNDNLISNRHFKLVYCIC 420
QY 421 HLLGMMSCCLNPILYGFLNNGIQRDL 446
Db 421 HLLGMMSCCLNPILYGFLNNGIQRDL 446

RESULT 9
ABB84497
ID ABB84497 standard; protein; 455 AA.
XX AC ABB84497;
XX DT 20-DEC-2002 (first entry)
XX BE Human hippocampus Y5 receptor protein.
XX KW Human; hippocampus; Y5; receptor; feeding behaviour; Y5 receptor;
KW food consumption; metabolic; anorectic; antidepressant; tranquiliser;
KW antimigraine; analgesic; hypotensive; cerebroprotective; cardiant;
KW antidiarrhoeic; haemostatic; vaccine; anorexia; obesity; bulimia;
KW sexual disorder; reproductive disorder; depression; anxiety; memory loss;
KW migraine; pain; epileptic seizure; hypertension; cerebral haemorrhage;
KW shock; congestive heart failure; sleeve disturbance; nasal congestion;
KW diarrhoea.
XX OS Homo sapiens.
XX PN US2002103123-A1.
XX PD 01-AUG-2002.
XX PF 24-SEP-2001; 2001US-00962646.
XX PR 02-DEC-1994; 94US-00349025.
XX PR 01-DEC-1995; 95US-00566096.
XX PR 25-NOV-1998; 98US-00200673.
XX PA (SYNA-) SYNAPTIC PHARM CORP.
XX PI Gerald CPG, Weinsbank RL, Walker MW, Branchek T;
XX DR WPI; 2002-712388/77.
XX DR N-PSDB; AAF88821.
XX PT Modifying feeding behavior of subject, useful in treating feeding
PT disorders, involves administering to subject Y5 receptor agonist or
PT antagonist, to increase or decrease consumption of food by subject.
XX

PS Claim 53; Fig 6; 102pp; English.
XX This invention describes a novel method of modifying feeding behaviour of
CC a subject which involves administering to the subject an amount of a
CC compound which is a Y5 receptor agonist or antagonist effective to
CC increase or decrease, respectively, the consumption of food by the
CC subject so as to modify feeding behaviour of the subject. The product of
CC the invention has metabolic, anorectic, antidepressant, tranquiliser,
CC antimigraine, analgesic, hypotensive, cerebroprotective, cardiant,
CC antidiarrhoeic and haemostatic activity and can be used in a vaccine. Y5
CC receptor agonist or antagonist compounds are useful for treating a
CC feeding disorder (e.g. anorexia, obesity or bulimia) in a subject. The
CC pharmaceutical compositions described in the disclosure are useful for
CC treating an abnormality alleviated by the inhibition or activation of Y5
CC receptor, in a subject. Antibodies raised against the receptor are useful
CC for detecting the presence of the receptor on the surface of a cell. The
CC agonist of Y5 receptor is useful for treating an abnormality in a
CC subject, where the abnormality includes anorexia, sexual/reproductive
CC disorder, depression, anxiety, memory loss, migraine, pain, epileptic
CC seizure, hypertension, cerebral haemorrhage, shock, congestive heart
CC failure, sleeve disturbance, nasal congestion, and diarrhoea. This
CC sequence represents the human hippocampus Y5 receptor described in the
CC disclosure of the invention
XX Sequence 455 AA;
SQ
Query Match 88.9%; Score 2326; DB 5; Length 455;
Best Local Similarity 99.6%; Pred. No. 3.7e-229;
Matches 444; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
QY 1 MSFYSKQDYNMDLEDEYNNKTATENNNTAATRNDFPFWDDYKSSVDDQLQVFLGLTYF 60
Db 1 MSFYSKQDYNMDLEDEYNNKTATENNNTAATRNDFPFWDDYKSSVDDQLQVFLGLTYF 60
QY 61 VSLGFMGNLLILMALMKRNQKTTVNFILGNLAFSDILVLFCSPPFTLTSLVLLDQWFG 120
Db 61 VSLGFMGNLLILMALMKRNQKTTVNFILGNLAFSDILVLFCSPPFTLTSLVLLDQWFG 120
QY 121 KVMCHIMPFLQCVSVLVSTLILISIAIVRYHMIKHPISNNLTANHGYFLIATVWTLGPAI 180
Db 121 KVMCHIMPFLQCVSVLVSTLILISIAIVRYHMIKHPISNNLTANHGYFLIATVWTLGPAI 180
QY 181 CSPLPVFHSVLVELQTFGSALLSSRYLCVESWPSDSYRIAFITISLLVQYILPLVCLTVS 240
Db 181 CSPLPVFHSVLVELQTFGSALLSSRYLCVESWPSDSYRIAFITISLLVQYILPLVCLTVS 240
QY 241 HTSVCRSISCGLSNKENLEENEMINTLHPKSKGPOVKLSGSHKWSYFIKKHRRYS 300
Db 241 HTSVCRSISCGLSNKENLEENEMINTLHPKSKGPOVKLSGSHKWSYFIKKHRRYS 300
QY 301 KKTACVLPAPERPSQENHSRILPENFGSVRSQSSSKFIPGVPTCFEIKPEENSVDVHEL 360
Db 301 KKTACVLPAPERPSQENHSRILPENFGSVRSQSSSKFIPGVPTCFEIKPEENSVDVHEL 360
QY 361 RVKRSVTRIKKRSRSVFYRLTILILVFAVSWMPLHLPHVVTDFNDNLISNRHFKLVYCIC 420
Db 361 RVKRSVTRIKKRSRSVFYRLTILILVFAVSWMPLHLPHVVTDFNDNLISNRHFKLVYCIC 420
QY 421 HLLGMMSCCLNPILYGFLNNGIQRDL 446
Db 421 HLLGMMSCCLNPILYGFLNNGIQRDL 446
RESULT 10
ABB79510
ID ABB79510 standard; protein; 455 AA.
XX AC ABB79510;
XX DT 23-SEP-2002 (first entry)
XX DE Human neurotensin Y5 receptor.
XX

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KW Neuropeptide Y5; NPV; receptor; human; antagonist; anorectic;
KW antiinflammatory; nootropic; neuroprotective; cardiovascular;
KW hypotensive; antidiabetic; psychiatric; anticonvulsant; cardiant;
KW cerebroprotective; antidepressant; haemostatic; tranquilizer;
KW neuroleptic; analgesic; antianal; nephrotropic; uropathic;
KW gastrointestinal; antiasthmatic.
XX Homo sapiens.
XX WO200248152-A2.
XX 20-JUN-2002.
XX 11-DEC-2001; 2001WO-US047863.
XX 12-DEC-2000; 2000US-0254990P.
XX (NEUR-) NEUROGEN CORP.
XX Bakthavatchalam R, Blum CA, Brielmann HL, Darrow JW;
XX De Lombaert S, Hutchison A, Tran J, Zheng X, Elliott RL, Hammond M;
XX WPI; 2002-547845/58.
XX N-PSDB; ABN84252.
XX New substituted spiro(isobenzofuran-1,4'-piperidin)-3-one or 3H-
XX spiroisobenzofuran-1,4'-piperidine, useful for treating, e.g. eating
XX disorder, psychiatric, cardiovascular disorder or diabetes.
XX Example 675; Page 129-130; 134pp; English.
XX The present sequence is the protein sequence for the human neuropeptide
XX Y5 (NPY5) receptor. In an example from the invention, chimeric receptors
XX including human NPY5 receptor sequences were constructed, and used to
XX assay the binding activity of compounds of the invention. Substituted
XX spiro(isobenzofuran-1,4'-piperidin)-3-ones and 3H-spiroisobenzofuran-1,4'-
XX piperidines capable of modulating NPY5 receptor activity are provided.
XX Such compounds may be used to modulate ligand binding to NPY5 receptors
XX in vivo or in vitro, and are particularly useful in the treatment of a
XX variety of disorders, e.g. eating disorders such as obesity or bulimia,
XX psychiatric disorders, diabetes and cardiovascular disorders such as
XX hypertension, in humans and animals
XX Sequence 455 AA;
Query Match 88.9%; Score 2326; DB 5; Length 455;
Best Local Similarity 99.6%; Pred. No. 3.7e-229;
Matches 444; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
QY 1 MSFYSKQDYNMDELDYNNKLTATENTTAATNSDPVWDDYKSSVDDLYQLGLYTF 60
Db 1 MSFYSKQDYNMDELDYNNKLTATENTTAATNSDPVWDDYKSSVDDLYQLGLYTF 60
QY 61 VSLGFMGNLLIIMALKRKNQKTTNVNFIAGLAFSDILVLFCSPTFLSVLLDQWFG 120
Db 61 VSLGFMGNLLIIMALKRKNQKTTNVNFIAGLAFSDILVLFCSPTFLSVLLDQWFG 120
QY 121 KVMCHMPFLOQCVSVLSTLILISIAIVRHMVKHPISSNNLTANHGFLIATVTLGFAI 180
Db 121 KVMCHMPFLOQCVSVLSTLILISIAIVRHMVKHPISSNNLTANHGFLIATVTLGFAI 180
QY 181 CSLPVPFHSVLVEIQETFGSALLSRVLCVSWPSDSYRIAFITSLILVQVILPLVCLTVS 240
Db 181 CSLPVPFHSVLVEIQETFGSALLSRVLCVSWPSDSYRIAFITSLILVQVILPLVCLTVS 240
QY 241 HTSVCRSISCGLNKENRLENEMINLTLPSSKSGQVVKLSGSHKWSYFIKRRRYS 300
Db 241 HTSVCRSISCGLNKENRLENEMINLTLPSSKSGQVVKLSGSHKWSYFIKRRRYS 300
QY 301 KKTACVLPAPERPSQENHNRILPENFGSVRSQSSSKFTIPGVPTCFEIKPEENSVDHEL 360
Db 301 KKTACVLPAPERPSQENHNRILPENFGSVRSQSSSKFTIPGVPTCFEIKPEENSVDHEL 360
QY 361 RVKRSVTRIKKRSRSVFYRLTILILVFAVSWMLHLFHVVTDFDNLISNRHFKLYVCIC 420
Db 361 RVKRSVTRIKKRSRSVFYRLTILILVFAVSWMLHLFHVVTDFDNLISNRHFKLYVCIC 420
QY 421 HLLGMSCCLNPILYGLFNNGIQDRL 446
Db 421 HLLGMSCCLNPILYGLFNNGIKADL 446
RESULT 11
AAO23266
ID AAO23266 standard; protein; 455 AA.
XX
XX AAO23266;
XX 25-SEP-2003 (first entry)
XX Human neuropeptide Y5 receptor (NPY5) protein.
XX Neuropeptide Y5; receptor; NPY5; 2-cyclohexyl-4-phenyl-1H-imidazole; NPV;
XX appetite regulation; feeding disorder; obesity; bulimia; diabetes;
XX psychiatric; cardiovascular; hypertension; cerebral infarction; epilepsy;
XX schizophrenia; depression; angina; sudden cardiac death; vasospasm;
XX arrhythmia; urinary incontinence; Crohn's disease; asthma; neuroleptic;
XX antiinflammatory; nootropic; vasotropic; anticonvulsant; uropathic;
XX human.
XX Homo sapiens.
XX EP1306085-A1.
XX 02-MAY-2003.
XX 21-OCT-2002; 2002EP-00023469.
XX 23-OCT-2001; 2001US-0348974P.
XX (NEUR-) NEUROGEN CORP.
XX Blum CA, Brielmann HL, De Lombaert S, Zheng X;
XX WPI; 2003-543553/52.
XX N-PSDB; AAL56583.
XX New 2-cyclohexyl-4-phenyl-1H-imidazole derivatives are modulators of
XX neuropeptide Y5 receptor activity, useful for treating e.g. eating or
XX psychiatric disorders.
XX Example 10; Page 39-41; 63pp; English.
XX This invention relates to novel ligands (derivatives of 2-cyclohexyl-4-
XX phenyl-1H-imidazole) for the neuropeptide Y5 (NPY5) receptor. The NPY5
XX receptor mediates a variety of physiological effects and is involved in
XX appetite regulation, hormone release and blood pressure. Ligands that
XX modulate the NPY5 receptor inhibit or enhance NPY binding such that they
XX can be used to treat a variety of conditions including feeding disorders
XX (obesity and bulimia), psychiatric disorders, diabetes and cardiovascular
XX diseases such as hypertension. Further uses relate to the treatment of
XX cerebral infarction, epilepsy, schizophrenia, depression, angina, sudden
XX cardiac death, vasospasm, arrhythmia, urinary incontinence, Crohn's
XX disease and asthma. As such these ligands can be described variously as
XX neuroleptic, antiinflammatory, nootropic, vasotropic, anticonvulsant and
XX uropathic. This polypeptide sequence is the human neuropeptide Y5 (NPY5)
XX receptor protien of the invention
XX Sequence 455 AA;
Query Match 88.9%; Score 2326; DB 6; Length 455;
Best Local Similarity 99.6%; Pred. No. 3.7e-229;
Matches 444; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
QY 1 MSFYSKQDYNMDELDYNNKLTATENTTAATNSDPVWDDYKSSVDDLYQLGLYTF 60
```


Db 1 MSFYSKQDYNMDELDELYNKTATENNNTAATRNDDFPVMDYKSSVDDLQVFLGLTYF 60
QY 61 VSLGFMGNLLILMALMKRNQKTTVNFIGNLAFSDILVLVFCSPFTLTSLVDQWMPG 120
Db 61 VSLGFMGNLLILMALMKRNQKTTVNFIGNLAFSDILVLVFCSPFTLTSLVDQWMPG 120
QY 121 KVMCHIMPFLQCVSVLVSTLILISIAIVRYHMIKHPISNNLTANHGFLIATVMTLGF 180
Db 121 KVMCHIMPFLQCVSVLVSTLILISIAIVRYHMIKHPISNNLTANHGFLIATVMTLGF 180
QY 181 CSPLPVHSLVELQETFGSALLSSRYLCVESWPSDSYRIAFITISLLVQYILPLVCLTVS 240
Db 181 CSPLPVHSLVELQETFGSALLSSRYLCVESWPSDSYRIAFITISLLVQYILPLVCLTVS 240
QY 241 HTSVCRSISCGLSNKENLEENEMINTLHPSKSGPOVKLSGSHKWSYFPIKHHRRYS 300
Db 241 HTSVCRSISCGLSNKENLEENEMINTLHPSKSGPOVKLSGSHKWSYFPIKHHRRYS 300
QY 301 KKTACVLPAPEPSPQENHSRILPENFGSVRSQSSSKFIPGVPTCFEIKPEENSDVHEL 360
Db 301 KKTACVLPAPEPSPQENHSRILPENFGSVRSQSSSKFIPGVPTCFEIKPEENSDVHEL 360
QY 361 RVKRSVTRIKKRSRVFRLTILILVAVSWMPLHLFHVVDTFDNDNLISNRHFKLVYCIC 420
Db 361 RVKRSVTRIKKRSRVFRLTILILVAVSWMPLHLFHVVDTFDNDNLISNRHFKLVYCIC 420
QY 421 HLLGMWSCCLNPILYGLNNGIQORDL 446
Db 421 HLLGMWSCCLNPILYGLNNGIKADL 446

RESULT 12

AD029564

ID AD029564 standard; protein; 455 AA.

XX AC AD029564;

XX DT 29-JUL-2004 (first entry)

XX SE Human GPCR NPV5R, SEQ ID NO:666.

XX KW G protein-coupled receptor; GPCR; drug screening; diagnosis;
transgenic mouse; neurological disorder; adrenal gland disorder;
colon disorder; intestinal disorder; cardiovascular disorder;
muscular disorder; blood disorder; immune disorder; bone disorder;
joint disorder; metabolic disorder; nutritive disorder; cancer;
kidney disorder; liver disorder; lung disorder; breast disorder;
ovary disorder; uterus disorder; prostate disorder; testis disorder;
skin disorder; stomach disorder; pancreas disorder; spleen disorder;
thymus disorder; thyroid disorder; antiparkinsonian; antimanic;
cytostatic; antiinflammatory; vasotropic; antidiabetic; antidiabetic;
CNS; central nervous system; respiratory; antidiarrhoeic; antidiabetic;
virucide; hepatotropic; antibacterial; antianaemic; antiseborrhoeic;
dermatological; antitumor; antithyroid; antiallergic; anorectic;
immunosuppressive; nephrotropic; Gene therapy; GPCR modulator; human;
receptor.

XX OS Homo sapiens.

XX FN WO2004040000-A2.

XX PD 13-MAY-2004.

XX PF 09-SEP-2003; 2003WO-US028226.

XX PR 09-SEP-2002; 2002US-0409303P.

XX PR 09-APR-2003; 2003US-0461329P.

XX PA (PRIM-) PRIMAL INC.

XX PI Gaitanaris GA, Bergmann JE, Gragerov A, Hohmann J, Li F;

XX PI Madisen L, McIlwain KL, Pavlova MN, Vassellatis D, Zeng H;

XX

DR WPI; 2004-390329/36.
DR N-PSDB; ADO30001.
XX Novel mammalian G protein coupled receptors, useful for identifying
PT compounds that modulates diagnosing and treating disease condition
PT associated with GPCR dysfunction e.g. autoimmune diseases, angina
PT pectoris, Parkinson's disease.
XX
XX Claim 151; SEQ ID NO 666; 542pp; English.
XX
CC The invention relates to human and mouse G protein-coupled receptors
CC (GPCRs) and nucleic acids encoding them. The invention also relates to
CC sequences at least 90% identical to the GPCR proteins and nucleic acids
CC of the invention; methods of treating, preventing or diagnosing diseases
CC associated with GPCRs of the invention; methods of screening for
CC compounds useful in the treatment of GPCR-related diseases; a transgenic
CC mouse comprising a GPCR gene of the invention; a mouse comprising a
CC mutation in a GPCR transgene or in an endogenous GPCR gene; cells derived
CC from the transgenic mice; kits comprising several mice, each of which has
CC a mutation in a different GPCR gene of the invention; and kits comprising
CC probes which hybridise to GPCR polynucleotides of the invention. The
CC invention further discloses variants of the GPCR polypeptides and vectors
CC comprising a GPCR nucleic acid. The GPCR nucleic acids and proteins may
CC be used in the diagnosis, treatment or prevention of a wide variety of
CC diseases including neurological disorders (e.g., Alzheimer's disease,
CC depression, diabetic neuropathy, Parkinson's disease or schizophrenia);
CC disorders of the adrenal gland; disorders of the colon or intestine
CC (e.g., Crohn's disease, diarrhoea, food poisoning or irritable bowel
CC syndrome); cardiovascular disorders (e.g., angina, cardiac arrhythmia or
CC myocardial infarction); muscular disorders; blood disorders (e.g.,
CC anaemia or leukaemia); immune disorders (e.g., autoimmune disorders or
CC AIDS); bone and joint disorders (e.g., osteoarthritis, rheumatoid
CC arthritis, gout or osteoporosis); metabolic or nutritive disorders (e.g.,
CC obesity, enzyme deficiency-related diseases or vitamin deficiency-related
CC diseases); and disorders of the kidney, liver, lung, breast, ovary,
CC uterus, prostate, testis, skin, stomach, pancreas, spleen, thymus and
CC thyroid (e.g., cancers). The present sequence represents a GPCR of the
CC invention. Note: The full sequence data for this patent did not form part
CC of the printed specification; those sequences not shown were obtained in
CC electronic format directly from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences.
XX
SQ Sequence 455 AA;

Query Match 88.9%; Score 2326; DB 8; Length 455;
Best Local Similarity 99.6%; Pred. No. 3.7e-229;
Matches 444; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 1 MSFYSKQDYNMDELDELYNKTATENNNTAATRNDDFPVMDYKSSVDDLQVFLGLTYF 60
Db 1 MSFYSKQDYNMDELDELYNKTATENNNTAATRNDDFPVMDYKSSVDDLQVFLGLTYF 60
QY 61 VSLGFMGNLLILMALMKRNQKTTVNFIGNLAFSDILVLVFCSPFTLTSLVDQWMPG 120
Db 61 VSLGFMGNLLILMALMKRNQKTTVNFIGNLAFSDILVLVFCSPFTLTSLVDQWMPG 120
QY 121 KVMCHIMPFLQCVSVLVSTLILISIAIVRYHMIKHPISNNLTANHGFLIATVMTLGF 180
Db 121 KVMCHIMPFLQCVSVLVSTLILISIAIVRYHMIKHPISNNLTANHGFLIATVMTLGF 180
QY 181 CSPLPVHSLVELQETFGSALLSSRYLCVESWPSDSYRIAFITISLLVQYILPLVCLTVS 240
Db 181 CSPLPVHSLVELQETFGSALLSSRYLCVESWPSDSYRIAFITISLLVQYILPLVCLTVS 240
QY 241 HTSVCRSISCGLSNKENLEENEMINTLHPSKSGPOVKLSGSHKWSYFPIKHHRRYS 300
Db 241 HTSVCRSISCGLSNKENLEENEMINTLHPSKSGPOVKLSGSHKWSYFPIKHHRRYS 300
QY 301 KKTACVLPAPEPSPQENHSRILPENFGSVRSQSSSKFIPGVPTCFEIKPEENSDVHEL 360
Db 301 KKTACVLPAPEPSPQENHSRILPENFGSVRSQSSSKFIPGVPTCFEIKPEENSDVHEL 360
QY 361 RVKRSVTRIKKRSRVFRLTILILVAVSWMPLHLFHVVDTFDNDNLISNRHFKLVYCIC 420

Db	361	RVKRSVTRIKKRSRSVFYRLTILILVFAVSWMPHLFHVVTDFNDNLISNRHFKLVYCIC	420
Qy	421	HLGMMSCCLNPILYGLFNNGIQDRL	446
Db	421	HLGMMSCCLNPILYGLFNNGIKADL	446
RESULT 13			
AAE08016	ID	AAE08016 standard; protein; 455 AA.	
XX	AC	AAE08016;	
XX	DT	01-NOV-2001 (first entry)	
XX	DE	African green monkey (AGM) neuropeptide Y5 (NPY5) receptor.	
XX	KW	Neuropeptide Y; NPY receptor; G-protein-coupled transmembrane protein; transmembrane; TM domain; therapy; obesity; blood pressure; epilepsy; Huntington's disorder; Parkinson's disorder; eating disorder; seizure; locomotor; anxiety disorder; limbic seizure; tranquilizer; african green monkey; AGM.	
XX	OS	Cercopithecus aethiops.	
XX	PN	WO200155103-A2.	
XX	PD	02-AUG-2001.	
XX	PF	29-JAN-2001; 2001WO-US002804.	
XX	PR	28-JAN-2000; 2000US-0178652P.	
XX	PA	(NEUR-) NEUROGEN CORP.	
XX	PI	Bennett M, Brodbeck R, Krause J;	
XX	DR	WPI; 2001-514543/56.	
XX	DR	NP-PSDB; AAD14746.	
XX	PT	New chimeric receptor proteins comprising a single polypeptide chain of amino acids, useful as targets for drug actions, and as basis for drug discovery and development.	
XX	PS	Example 2; Page 70-72; 72pp; English.	
XX	CC	The present invention relates to chimeric neuropeptide Y (NPY) receptors. The NPY receptors are G-protein-coupled transmembrane proteins with seven membrane spanning transmembrane (TM) domains. The compounds that modulate the activity of a NPY receptor is useful in the preparation of a medicament for treating conditions including obesity, high/low blood pressure, epilepsy, Huntington's and Parkinson's disorder and eating, seizure, locomotor and anxiety disorders. They can also be used as targets for drug actions, and as basis for drug discovery and development. The NPY5 receptor may have an anti-epileptic activity in the control of limbic seizures. The present sequence is african green monkey (AGM) NPY5 receptor	
XX	SQ	Sequence 455 AA;	
Query Match 88.6%; Score 2317; DB 4; Length 455;			
Best Local Similarity 99.1%; Pred. No. 3.1e-228;			
Matches 442; Conservative 2; Mismatches 2; Indels 0; Gaps 0;			
Qy	1	MSFYSKQDYNMDLEDEYKNTLATENNATATRNSDFPVMDYKSSVDDQLQYFLIGLYTF	60
Db	1	MSFYSKQDYNMDLEDEYKNTLATENNATATRNSDFPVMDYKSSVDDQLQYFLIGLYTF	60
Qy	61	VSLLGFNGLLILMALMKRQKTTVNFNLGNLAFSDTLVLVFCSPFTLSVLLDDQWFG	120
Db	61	VSLLGFNGLLILMALMKRQKTTVNFNLGNLAFSDTLVLVFCSPFTLSVLLDDQWFG	120
Qy	121	KVCHIMPLQCVSLVSTLILISIAIVRYHMIKPIISNNLTANHGYFLIATVWTILGFAL	180
Db	121	KVCHIMPLQCVSLVSTLILISIAIVRYHMIKPIISNNLTANHGYFLIATVWTILGFAL	180
Qy	181	CSPLPVFHSVLVELQETFGSALLSSRYLCVESWPSDSYRIAFTISLLLVQYILPLVCLTVS	240
Db	181	CSPLPVFHSVLVELQETFGSALLSSRYLCVESWPSDSYRIAFTISLLLVQYILPLVCLTVS	240
Qy	241	HTSVCRSISCGLSNKENRLEENMINLTLPBCKSGPOVKLSGSHKWSYFTKKHRRYS	300
Db	241	HTSVCRSISCGLSNKENRLEENMINLTLPBCKSGPOVKLSGSHKWSYFTKKHRRYS	300
Qy	301	KKTACVLPAPERPSQENHSRIILPENFGSVRSQSSSKFIPGVPTCFEIKPEENSVDHEL	360
Db	301	KKTACVLPAPERPSQENHSRIILPENFGSVRSQSSSKFIPGVPTCFEIKPEENSVDHEL	360
Qy	361	RVKRSVTRIKKRSRSVFYRLTILILVFAVSWMPHLFHVVTDFNDNLISNRHFKLVYCIC	420
Db	361	RVKRSVTRIKKRSRSVFYRLTILILVFAVSWMPHLFHVVTDFNDNLISNRHFKLVYCIC	420
Qy	421	HLGMMSCCLNPILYGLFNNGIQDRL	446
Db	421	HLGMMSCCLNPILYGLFNNGIKADL	446
RESULT 14			
AAE08012	ID	AAE08012 standard; protein; 499 AA.	
XX	AC	AAE08012;	
XX	DT	01-NOV-2001 (first entry)	
XX	DE	Rat chimeric rNPY5deltarY1CT receptor.	
XX	KW	Neuropeptide Y; NPY receptor; G-protein-coupled transmembrane protein; transmembrane; TM domain; therapy; obesity; blood pressure; epilepsy; Huntington's disorder; Parkinson's disorder; eating disorder; seizure; locomotor; anxiety disorder; limbic seizure; tranquilizer; rat; chimeric receptor.	
XX	OS	Rattus sp.	
XX	PN	WO200155103-A2.	
XX	PD	02-AUG-2001.	
XX	PF	29-JAN-2001; 2001WO-US002804.	
XX	PR	28-JAN-2000; 2000US-0178652P.	
XX	PA	(NEUR-) NEUROGEN CORP.	
XX	PI	Bennett M, Brodbeck R, Krause J;	
XX	DR	WPI; 2001-514543/56.	
XX	DR	New chimeric receptor proteins comprising a single polypeptide chain of amino acids, useful as targets for drug actions, and as basis for drug discovery and development.	
XX	PS	Example 2; Page 64-65; 72pp; English.	
XX	CC	The present invention relates to chimeric neuropeptide Y (NPY) receptors. The NPY receptors are G-protein-coupled transmembrane proteins with seven membrane spanning transmembrane (TM) domains. The compounds that modulate the activity of a NPY receptor is useful in the preparation of a medicament for treating conditions including obesity, high/low blood pressure, epilepsy, Huntington's and Parkinson's disorder and eating, seizure, locomotor and anxiety disorders. They can also be used as targets for drug actions, and as basis for drug discovery and development. The NPY5 receptor may have an anti-epileptic activity in the control of limbic seizures. The present sequence is rat chimeric	

GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: June 7, 2005, 17:50:21 ; Search time 43 Seconds
(without alignments)
866.276 Million cell updates/sec

Title: US-09-771-956-9
Perfect score: 2616
Sequence: 1 MSFYSKQDYNMDELDEYNN.....KQASFPVAFKINNDNEKI 499

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 513545 seqs, 74649064 residues

Total number of hits satisfying chosen parameters: 513545

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : Issued Patents_AA.*
1: /cgn2_6/ptodata/1/iaa/5A_COMB.pap.*
2: /cgn2_6/ptodata/1/iaa/5B_COMB.pap.*
3: /cgn2_6/ptodata/1/iaa/6A_COMB.pap.*
4: /cgn2_6/ptodata/1/iaa/6B_COMB.pap.*
5: /cgn2_6/ptodata/1/iaa/PTJUS_COMB.pap.*
6: /cgn2_6/ptodata/1/iaa/backfiles1.pap.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	2326	88.9	455	1	US-08-349-025-4
2	2326	88.9	455	2	US-08-566-096A-4
3	2326	88.9	455	2	US-08-668-650B-4
4	2326	88.9	455	3	US-09-200-673-4
5	2326	88.9	455	4	US-09-194-895-4
6	2326	88.9	455	4	US-09-194-895-4
7	2326	88.9	455	4	US-09-447-907-4
8	2326	88.9	455	4	US-09-962-646-4
9	2326	88.9	455	5	PCT-US95-15646-4
10	2271	86.8	445	2	US-08-630-118A-6
11	2271	86.8	445	2	US-08-838-399-6
12	2271	86.8	445	2	US-09-003-199-21
13	2271	86.8	445	3	US-09-235-839-6
14	2271	86.8	445	3	US-09-327-035-6
15	2271	86.8	445	4	US-09-065-027-2
16	2271	86.8	445	4	US-09-708-392-13
17	2267	86.7	445	4	US-09-065-027-4
18	2262	86.5	445	3	US-09-040-958-2
19	2262	86.5	445	3	US-09-040-958-4
20	2262	86.5	445	4	US-09-826-509-533
21	2212	84.6	456	2	US-08-668-650B-14
22	2212	84.6	456	4	US-09-194-895-14
23	2212	84.6	456	4	US-09-447-907-14
24	2207	84.4	445	2	US-09-003-199-2
25	2036.5	77.8	456	1	US-08-349-025-2
26	2036.5	77.8	456	2	US-08-566-096A-2
27	2036.5	77.8	456	2	US-08-668-650B-2

28	2036.5	77.8	456	3	US-09-200-673-2	Sequence 2, Appli
29	2036.5	77.8	456	4	US-09-194-895-2	Sequence 2, Appli
30	2036.5	77.8	456	4	US-09-447-907-2	Sequence 2, Appli
31	2036.5	77.8	456	4	US-09-962-646-2	Sequence 2, Appli
32	2036.5	77.8	456	5	PCT-US95-15646-2	Sequence 2, Appli
33	2026.5	77.5	445	2	US-08-630-118A-4	Sequence 4, Appli
34	2026.5	77.5	445	2	US-08-838-399-4	Sequence 4, Appli
35	2026.5	77.5	445	2	US-09-003-199-23	Sequence 23, Appli
36	2026.5	77.5	445	3	US-09-235-839-4	Sequence 4, Appli
37	2026.5	77.5	445	3	US-09-327-035-4	Sequence 4, Appli
38	2026	77.4	466	4	US-09-065-027-8	Sequence 8, Appli
39	2024.5	77.4	445	4	US-09-065-027-6	Sequence 6, Appli
40	2019.5	77.2	445	2	US-08-630-118A-2	Sequence 2, Appli
41	2019.5	77.2	445	2	US-08-838-399-2	Sequence 2, Appli
42	2019.5	77.2	445	3	US-09-235-839-2	Sequence 2, Appli
43	2019.5	77.2	445	3	US-09-327-035-2	Sequence 2, Appli
44	1899.5	72.6	394	4	US-10-013-846-17	Sequence 17, Appli
45	1621	62.0	334	2	US-08-566-096A-6	Sequence 6, Appli

ALIGNMENTS

RESULT 1
US-08-349-025-4
; Sequence 4, Application US/08349025
; Patent No. 5602024
; GENERAL INFORMATION:
; APPLICANT: Gerald, Christophe P.G.
; APPLICANT: Walker, Mary W.
; APPLICANT: Branchek, Theresa
; APPLICANT: Weinschank, Richard L.
; TITLE OF INVENTION: DNA ENCODING A HYPOTHALAMIC ATYPICAL
; TITLE OF INVENTION: NEUROPEPTIDE Y/PEPTIDE YY RECEPTOR (Y5) AND USES THEREOF
; NUMBER OF SEQUENCES: 4
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Cooper & Dunham
; STREET: 1185 Avenue of the Americas
; CITY: New York
; STATE: New York
; COUNTRY: United States of America
; ZIP: 10036
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/349,025
; FILING DATE:
; CLASSIFICATION: 514
; ATTORNEY/AGENT INFORMATION:
; NAME: White, John P.
; REGISTRATION NUMBER: 28,678
; REFERENCE/DOCKET NUMBER: 1795/46166
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (212) 278-0400
; TELEFAX: (212) 391-0525
; TELEX: 422523 COOP UI
; INFORMATION FOR SEQ ID NO: 4:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 455 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; US-08-349-025-4

Query Match 88.9%; Score 2326; DB 1; Length 455;
Best Local Similarity 99.6%; Pred. No. 1.5e-168;
Matches 444; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

Oy 1 MSFYSKQDYNMDELDEYNNKTLATENNATRNSPFVMDYKSSVDDQLQYFLIGLYTF 60
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Db 1 MSFYKQDYNMDELDEYYNKTATENNNTAATNSDFPVWDDYKSSVDDLYQYFLIGLYTF 60
QY 61 VSLGFMGNLLIILMALMKRNQKTTVNFIGNLAFSDILVVLFCSPFTLTSLVLLDQWMEG 120
Db 61 VSLGFMGNLLIILMALMKRNQKTTVNFIGNLAFSDILVVLFCSPFTLTSLVLLDQWMEG 120
QY 121 KWCHIMPFLQCVSVLVSTLILISIAIVRYHMIKHPISSNNLTANHGVELIATVMTLGEAI 180
Db 121 KWCHIMPFLQCVSVLVSTLILISIAIVRYHMIKHPISSNNLTANHGVELIATVMTLGEAI 180
QY 181 CSPLPVHSLVELQETFGSALLSSRYLCVESWPSDSYRIAFITISLLLVQYILPLVCLTVS 240
Db 181 CSPLPVHSLVELQETFGSALLSSRYLCVESWPSDSYRIAFITISLLLVQYILPLVCLTVS 240
QY 241 HTSVCRSISCGLSNKENRLEENEMINLTLPKSKSGPQVKSQSHKWSYFIKKHRRYS 300
Db 241 HTSVCRSISCGLSNKENRLEENEMINLTLPKSKSGPQVKSQSHKWSYFIKKHRRYS 300
QY 301 KKTACVLPAPERPSQENHSRILPENFGSVRSQSLSKSKFIPGVPTCFEIKPEENSVDHEL 360
Db 301 KKTACVLPAPERPSQENHSRILPENFGSVRSQSLSKSKFIPGVPTCFEIKPEENSVDHEL 360
QY 361 RVKRSVTRIKRSRSVFYRLTILILVFAVSWMPLHLFHVVTDFNDNLISNRHFKLVYCIC 420
Db 361 RVKRSVTRIKRSRSVFYRLTILILVFAVSWMPLHLFHVVTDFNDNLISNRHFKLVYCIC 420
QY 421 HLLGMSCCLNPILYGLFNNGIQDRL 446
Db 421 HLLGMSCCLNPILYGLFNNGIKADL 446
RESULT 2
US-08-566-096A-4
; Sequence 4, Application US/08566096A
; Patent No. 5968819
; GENERAL INFORMATION:
; APPLICANT: Gerald, Christophe P.G.
; APPLICANT: Walker, Mary W.
; APPLICANT: Branchek, Theresa
; TITLE OF INVENTION: METHODS OF MODIFYING FEEDING BEHAVIOR,
; TITLE OF INVENTION: COMPOUNDS USEFUL IN SUCH METHODS, AND DNA ENCODING A HYPOTHALAMIC
; TITLE OF INVENTION: NEUROPEPTIDE Y/PEPTIDE YY RECEPTOR (Y5) AND USES THEREOF
; NUMBER OF SEQUENCES: 12
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Cooper & Dunham LLP
; STREET: 1185 Avenue of the Americas
; CITY: New York
; STATE: New York
; COUNTRY: United States of America
; ZIP: 10036
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA: US/08/566,096A
; FILING DATE:
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: White, John P.
; REGISTRATION NUMBER: 28,678
; REFERENCE/DOCKET NUMBER: 1795/46166-B
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (212) 278-0400
; TELEFAX: (212) 391-0525
; INFORMATION FOR SEQ ID NO: 4:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 455 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein

US-08-566-096A-4
Query Match 88.9%; Score 2326; DB 2; Length 455;
Best Local Similarity 99.6%; Pred. No. 1.5e-168;
Matches 444; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
QY 1 MSFYKQDYNMDELDEYYNKTATENNNTAATNSDFPVWDDYKSSVDDLYQYFLIGLYTF 60
Db 1 MSFYKQDYNMDELDEYYNKTATENNNTAATNSDFPVWDDYKSSVDDLYQYFLIGLYTF 60
QY 61 VSLGFMGNLLIILMALMKRNQKTTVNFIGNLAFSDILVVLFCSPFTLTSLVLLDQWMEG 120
Db 61 VSLGFMGNLLIILMALMKRNQKTTVNFIGNLAFSDILVVLFCSPFTLTSLVLLDQWMEG 120
QY 121 KWCHIMPFLQCVSVLVSTLILISIAIVRYHMIKHPISSNNLTANHGVELIATVMTLGEAI 180
Db 121 KWCHIMPFLQCVSVLVSTLILISIAIVRYHMIKHPISSNNLTANHGVELIATVMTLGEAI 180
QY 181 CSPLPVHSLVELQETFGSALLSSRYLCVESWPSDSYRIAFITISLLLVQYILPLVCLTVS 240
Db 181 CSPLPVHSLVELQETFGSALLSSRYLCVESWPSDSYRIAFITISLLLVQYILPLVCLTVS 240
QY 241 HTSVCRSISCGLSNKENRLEENEMINLTLPKSKSGPQVKSQSHKWSYFIKKHRRYS 300
Db 241 HTSVCRSISCGLSNKENRLEENEMINLTLPKSKSGPQVKSQSHKWSYFIKKHRRYS 300
QY 301 KKTACVLPAPERPSQENHSRILPENFGSVRSQSLSKSKFIPGVPTCFEIKPEENSVDHEL 360
Db 301 KKTACVLPAPERPSQENHSRILPENFGSVRSQSLSKSKFIPGVPTCFEIKPEENSVDHEL 360
QY 361 RVKRSVTRIKRSRSVFYRLTILILVFAVSWMPLHLFHVVTDFNDNLISNRHFKLVYCIC 420
Db 361 RVKRSVTRIKRSRSVFYRLTILILVFAVSWMPLHLFHVVTDFNDNLISNRHFKLVYCIC 420
QY 421 HLLGMSCCLNPILYGLFNNGIQDRL 446
Db 421 HLLGMSCCLNPILYGLFNNGIKADL 446
RESULT 3
US-08-668-650B-4
; Sequence 4, Application US/08668650B
; Patent No. 5989920
; GENERAL INFORMATION:
; APPLICANT: Gerald, Christophe P.G.
; APPLICANT: Walker, Mary W.
; APPLICANT: Branchek, Theresa
; APPLICANT: Weinshank, Richard L.
; TITLE OF INVENTION: Methods of Modifying Feeding Behavior,
; TITLE OF INVENTION: Compounds Useful in Such Methods, And DNA Encoding a
; TITLE OF INVENTION: Hypothalamic Atypical Neuropeptide Y/Peptide YY Receptor
; TITLE OF INVENTION:
; NUMBER OF SEQUENCES: 24
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Cooper & Dunham LLP
; STREET: 1185 Avenue of the Americas
; CITY: New York
; STATE: NY
; COUNTRY: U.S.A.
; ZIP: 10036
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA: US/08/668,650B
; APPLICATION NUMBER: 04-JUN-1996
; CLASSIFICATION: 536
; ATTORNEY/AGENT INFORMATION:
; NAME: White Esq., John P.
; REGISTRATION NUMBER: 28,678
; REFERENCE/DOCKET NUMBER: 1795/46166C

TELECOMMUNICATION INFORMATION:
TELEPHONE: 212-278-0400
TELEFAX: 212-391-0525
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
LENGTH: 455 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-668-650B-4

Query Match 88.9%; Score 2326; DB 2; Length 455;
Best Local Similarity 99.6%; Pred. No. 1.5e-168;
Matches 444; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
Qy 1 MSFYSKQDYNMDELDEYNNKTLATENNNTAATRNDFPVMDDYKSSVDDLDQYFLIGLYTF 60
Db 1 MSFYSKQDYNMDELDEYNNKTLATENNNTAATRNDFPVMDDYKSSVDDLDQYFLIGLYTF 60
Qy 61 VSLGFMGNLLILMALMKRQKTTVNFLIGNLAFSDILVLFCSPPFTLTSVLLDQWMPG 120
Db 61 VSLGFMGNLLILMALMKRQKTTVNFLIGNLAFSDILVLFCSPPFTLTSVLLDQWMPG 120
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Db 121 KVMCHIMFLOCVSVLSTLISIAIVRYHMIKHIPISNNLTANHGYFLIATVTLGPAI 180
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Db 181 CSPLPVFHSLVELQETFGSALLSRYLCVESWPSDSYRIAFITISLLVQYILPLVCLTVS 240
Qy 241 HTSVCRSISCGLSNKENLEENEMINTLHPSKSGPOVKLSGSHKWSYSPFKKHRRYS 300
Db 241 HTSVCRSISCGLSNKENLEENEMINTLHPSKSGPOVKLSGSHKWSYSPFKKHRRYS 300
Qy 301 KKTACVLPAPERPSQENHSRILPENFGSVRSQSSSKFIPGVPTCFEIKPEENS DVHEL 360
Db 301 KKTACVLPAPERPSQENHSRILPENFGSVRSQSSSKFIPGVPTCFEIKPEENS DVHEL 360
Qy 361 RVKRSVTRIKKRSRVFRLTILVFAVSWMPLHLFHVVTDFDNDNLISNRHFKLVYCIC 420
Db 361 RVKRSVTRIKKRSRVFRLTILVFAVSWMPLHLFHVVTDFDNDNLISNRHFKLVYCIC 420
Qy 421 HLLGMSCCLNPILYGLFNNIGIQRDL 446
Db 421 HLLGMSCCLNPILYGLFNNIGIQRDL 446

RESULT 4
US-09-200-673-4
; Sequence 4, Application US/09200673A
; Patent No. 6316203
; GENERAL INFORMATION:
; APPLICANT: Gerald, Christophe P.G.
; APPLICANT: Weinshank, Richard L.
; APPLICANT: Walker, Mary W.
; APPLICANT: Brancheck, Theresa
; TITLE OF INVENTION: Methods of Modifying Feeding Behavior, Compounds Useful
; TITLE OF INVENTION: In Such Methods, and DNA Encoding A Hypothalamic
; TITLE OF INVENTION: Atypical Neuropeptide Y/Peptide YY Receptor (Y5)
; FILE REFERENCE: 46166-BZ/JPW
; CURRENT APPLICATION NUMBER: US/09/200,673A
; CURRENT FILING DATE: 1998-11-25
; EARLIER APPLICATION NUMBER: 08/566,096
; EARLIER FILING DATE: 1995-12-01
; EARLIER APPLICATION NUMBER: 08/349,025
; EARLIER FILING DATE: 1994-12-02
; NUMBER OF SEQ ID NOS: 17
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 4
; LENGTH: 455
; TYPE: PRT
; ORGANISM: Homo sapiens

US-09-200-673-4
Query Match 88.9%; Score 2326; DB 3; Length 455;
Best Local Similarity 99.6%; Pred. No. 1.5e-168;
Matches 444; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
Qy 1 MSFYSKQDYNMDELDEYNNKTLATENNNTAATRNDFPVMDDYKSSVDDLDQYFLIGLYTF 60
Db 1 MSFYSKQDYNMDELDEYNNKTLATENNNTAATRNDFPVMDDYKSSVDDLDQYFLIGLYTF 60
Qy 61 VSLGFMGNLLILMALMKRQKTTVNFLIGNLAFSDILVLFCSPPFTLTSVLLDQWMPG 120
Db 61 VSLGFMGNLLILMALMKRQKTTVNFLIGNLAFSDILVLFCSPPFTLTSVLLDQWMPG 120
Qy 121 KVMCHIMFLOCVSVLSTLISIAIVRYHMIKHIPISNNLTANHGYFLIATVTLGPAI 180
Db 121 KVMCHIMFLOCVSVLSTLISIAIVRYHMIKHIPISNNLTANHGYFLIATVTLGPAI 180
Qy 181 CSPLPVFHSLVELQETFGSALLSRYLCVESWPSDSYRIAFITISLLVQYILPLVCLTVS 240
Db 181 CSPLPVFHSLVELQETFGSALLSRYLCVESWPSDSYRIAFITISLLVQYILPLVCLTVS 240
Qy 241 HTSVCRSISCGLSNKENLEENEMINTLHPSKSGPOVKLSGSHKWSYSPFKKHRRYS 300
Db 241 HTSVCRSISCGLSNKENLEENEMINTLHPSKSGPOVKLSGSHKWSYSPFKKHRRYS 300
Qy 301 KKTACVLPAPERPSQENHSRILPENFGSVRSQSSSKFIPGVPTCFEIKPEENS DVHEL 360
Db 301 KKTACVLPAPERPSQENHSRILPENFGSVRSQSSSKFIPGVPTCFEIKPEENS DVHEL 360
Qy 361 RVKRSVTRIKKRSRVFRLTILVFAVSWMPLHLFHVVTDFDNDNLISNRHFKLVYCIC 420
Db 361 RVKRSVTRIKKRSRVFRLTILVFAVSWMPLHLFHVVTDFDNDNLISNRHFKLVYCIC 420
Qy 421 HLLGMSCCLNPILYGLFNNIGIQRDL 446
Db 421 HLLGMSCCLNPILYGLFNNIGIQRDL 446

RESULT 5
US-09-194-895-4
; Sequence 4, Application US/09194895
; Patent No. 6531287
; GENERAL INFORMATION:
; APPLICANT: Gerald, Christophe P.G.
; APPLICANT: Weinshank, Richard L.
; APPLICANT: Walker, Mary M
; APPLICANT: Brancheck, Theresa
; TITLE OF INVENTION: Methods of Modifying Feeding Behavior, Compounds Useful
; TITLE OF INVENTION: In Such Methods, and DNA Encoding A Hypothalamic
; TITLE OF INVENTION: Atypical Neuropeptide Y/Peptide YY Receptor (Y5)
; FILE REFERENCE: 1795-46166-D-PCT-US/JPW/BUA
; CURRENT APPLICATION NUMBER: US/09/194,895
; CURRENT FILING DATE: 1999-09-27
; PRIOR APPLICATION NUMBER: PCT/US97/09504
; PRIOR FILING DATE: 1997-06-04
; NUMBER OF SEQ ID NOS: 24
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 4
; LENGTH: 455
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-194-895-4

Query Match 88.9%; Score 2326; DB 4; Length 455;
Best Local Similarity 99.6%; Pred. No. 1.5e-168;
Matches 444; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
Qy 1 MSFYSKQDYNMDELDEYNNKTLATENNNTAATRNDFPVMDDYKSSVDDLDQYFLIGLYTF 60
Db 1 MSFYSKQDYNMDELDEYNNKTLATENNNTAATRNDFPVMDDYKSSVDDLDQYFLIGLYTF 60
Qy 61 VSLGFMGNLLILMALMKRQKTTVNFLIGNLAFSDILVLFCSPPFTLTSVLLDQWMPG 120

Db 61 VSLGFMGNLLILMALMKRNQKTTVNFIGNLAFSDILVLFCSPTLTSLVLLDQWVFG 120
QY 121 KVMCHIMPFLQCVSVLSTLILISIAIVRYHMIKHPISNNLTANHGYSFLIATVWTLGFAI 180
Db 121 KVMCHIMPFLQCVSVLSTLILISIAIVRYHMIKHPISNNLTANHGYSFLIATVWTLGFAI 180
QY 181 CSPLPVPHSLVELOETFGSALLSSRYLCVESWPSDSYRIAFTISLLLVQVILPLVCLTVS 240
Db 181 CSPLPVPHSLVELOETFGSALLSSRYLCVESWPSDSYRIAFTISLLLVQVILPLVCLTVS 240
QY 241 HTSVCRSISCGLSNKENRLEENEMINLTLPSSKSGPQVKLSGSHKWSYSFIKKHRRYS 300
Db 241 HTSVCRSISCGLSNKENRLEENEMINLTLPSSKSGPQVKLSGSHKWSYSFIKKHRRYS 300
QY 301 KKTACVLPAPERPSQENHSRILPENFGSVRSQSSSKFIPGVPCTCFEIKPEENSVDHEL 360
Db 301 KKTACVLPAPERPSQENHSRILPENFGSVRSQSSSKFIPGVPCTCFEIKPEENSVDHEL 360
QY 361 RVKRSVTRIKKRSRVFYRLTILILVFAVSWMPLHLFHVVTDFNDNLISNRHFKLVYCIC 420
Db 361 RVKRSVTRIKKRSRVFYRLTILILVFAVSWMPLHLFHVVTDFNDNLISNRHFKLVYCIC 420
QY 421 HLLGMMSCCLNPILYGLFNNGIORDL 446
Db 421 HLLGMMSCCLNPILYGLFNNGIKADL 446

RESULT 6
US-10-013-846-7
; Sequence 7, Application US/10013846
; Patent No. 656367
; GENERAL INFORMATION:
; APPLICANT: Bakthavatchalam, Rajagopal
; APPLICANT: Blum, Charles A
; APPLICANT: Brielmann, Harry L
; APPLICANT: Darrow, James W
; APPLICANT: De Lombaert, Stephane
; APPLICANT: Hutchison, Alan
; APPLICANT: Tran, Jennifer
; APPLICANT: Zheng, Xiaozhang
; APPLICANT: Elliott, Richard L
; APPLICANT: Hammond, Marlys
; TITLE OF INVENTION: Spiroisobenzofuran-1,4'-piperidin-3-ones and
; TITLE OF INVENTION: 3H-spiroisobenzofuran-1,4'-piperidines
; FILE REFERENCE: N00.2001
; CURRENT APPLICATION NUMBER: US/10/013,846
; PRIOR FILING DATE: 2001-12-11
; PRIOR APPLICATION NUMBER: US 60/254,990
; PRIOR FILING DATE: 2000-12-12
; NUMBER OF SEQ ID NOS: 17
; SOFTWARE: Patentin version 3.1
; SEQ ID NO 7
; LENGTH: 455
; TYPE: PRT
; ORGANISM: homosapiens
US-10-013-846-7

Query Match 88.9%; Score 2326; DB 4; Length 455;
Best Local Similarity 99.6%; Pred. No. 1.5e-168;
Matches 444; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
QY 1 MSFYSKQDYNMDLELDEYNNKTLATENNNTAATNSDPVWDDYKSSVDDLYQFLIGLYTF 60
Db 1 MSFYSKQDYNMDLELDEYNNKTLATENNNTAATNSDPVWDDYKSSVDDLYQFLIGLYTF 60
QY 61 VSLGFMGNLLILMALMKRNQKTTVNFIGNLAFSDILVLFCSPTLTSLVLLDQWVFG 120
Db 61 VSLGFMGNLLILMALMKRNQKTTVNFIGNLAFSDILVLFCSPTLTSLVLLDQWVFG 120
QY 121 KVMCHIMPFLQCVSVLSTLILISIAIVRYHMIKHPISNNLTANHGYSFLIATVWTLGFAI 180
Db 121 KVMCHIMPFLQCVSVLSTLILISIAIVRYHMIKHPISNNLTANHGYSFLIATVWTLGFAI 180

QY 181 CSPLPVPHSLVELOETFGSALLSSRYLCVESWPSDSYRIAFTISLLLVQVILPLVCLTVS 240
Db 181 CSPLPVPHSLVELOETFGSALLSSRYLCVESWPSDSYRIAFTISLLLVQVILPLVCLTVS 240
QY 241 HTSVCRSISCGLSNKENRLEENEMINLTLPSSKSGPQVKLSGSHKWSYSFIKKHRRYS 300
Db 241 HTSVCRSISCGLSNKENRLEENEMINLTLPSSKSGPQVKLSGSHKWSYSFIKKHRRYS 300
QY 301 KKTACVLPAPERPSQENHSRILPENFGSVRSQSSSKFIPGVPCTCFEIKPEENSVDHEL 360
Db 301 KKTACVLPAPERPSQENHSRILPENFGSVRSQSSSKFIPGVPCTCFEIKPEENSVDHEL 360
QY 361 RVKRSVTRIKKRSRVFYRLTILILVFAVSWMPLHLFHVVTDFNDNLISNRHFKLVYCIC 420
Db 361 RVKRSVTRIKKRSRVFYRLTILILVFAVSWMPLHLFHVVTDFNDNLISNRHFKLVYCIC 420
QY 421 HLLGMMSCCLNPILYGLFNNGIORDL 446
Db 421 HLLGMMSCCLNPILYGLFNNGIKADL 446

RESULT 7
US-09-447-907-4
; Sequence 4, Application US/09447907
; Patent No. 6645774
; GENERAL INFORMATION:
; APPLICANT: Gerald, Christophe P.G.
; APPLICANT: Weinshank, Richard L
; APPLICANT: Walker, Mary W
; APPLICANT: Brancheke, Theresa
; TITLE OF INVENTION: Methods of Modifying Feeding Behavior, Compounds Useful in Such Me
; TITLE OF INVENTION: and DNA Encoding A Hypothalamic Atypical Neuropeptide Y/Peptide Y
; FILE REFERENCE: 1795-46166CA
; CURRENT APPLICATION NUMBER: US/09/447,907
; CURRENT FILING DATE: 1999-11-23
; PRIOR APPLICATION NUMBER: 08/668,650
; PRIOR FILING DATE: 1996-06-04
; NUMBER OF SEQ ID NOS: 24
; SOFTWARE: Patentin version 3.1
; SEQ ID NO 4
; LENGTH: 455
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Human Y5 cDNA clone
US-09-447-907-4

Query Match 88.9%; Score 2326; DB 4; Length 455;
Best Local Similarity 99.6%; Pred. No. 1.5e-168;
Matches 444; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
QY 1 MSFYSKQDYNMDLELDEYNNKTLATENNNTAATNSDPVWDDYKSSVDDLYQFLIGLYTF 60
Db 1 MSFYSKQDYNMDLELDEYNNKTLATENNNTAATNSDPVWDDYKSSVDDLYQFLIGLYTF 60
QY 61 VSLGFMGNLLILMALMKRNQKTTVNFIGNLAFSDILVLFCSPTLTSLVLLDQWVFG 120
Db 61 VSLGFMGNLLILMALMKRNQKTTVNFIGNLAFSDILVLFCSPTLTSLVLLDQWVFG 120
QY 121 KVMCHIMPFLQCVSVLSTLILISIAIVRYHMIKHPISNNLTANHGYSFLIATVWTLGFAI 180
Db 121 KVMCHIMPFLQCVSVLSTLILISIAIVRYHMIKHPISNNLTANHGYSFLIATVWTLGFAI 180
QY 181 CSPLPVPHSLVELOETFGSALLSSRYLCVESWPSDSYRIAFTISLLLVQVILPLVCLTVS 240
Db 181 CSPLPVPHSLVELOETFGSALLSSRYLCVESWPSDSYRIAFTISLLLVQVILPLVCLTVS 240
QY 241 HTSVCRSISCGLSNKENRLEENEMINLTLPSSKSGPQVKLSGSHKWSYSFIKKHRRYS 300
Db 241 HTSVCRSISCGLSNKENRLEENEMINLTLPSSKSGPQVKLSGSHKWSYSFIKKHRRYS 300
QY 301 KKTACVLPAPERPSQENHSRILPENFGSVRSQSSSKFIPGVPCTCFEIKPEENSVDHEL 360

Db 301 KKTACVLPAPEPQENHSRILPENFGSVRSQSSSKFIPGVPTCFEIKPEENSDVHEL 360
Qy 361 RVKRSVTRIKKRSRVFVRLTILILVFAVSNMPLHLFHVVTDFNDNLISNRHFKLVYCIC 420
Db 361 RVKRSVTRIKKRSRVFVRLTILILVFAVSNMPLHLFHVVTDFNDNLISNRHFKLVYCIC 420
Qy 421 HLLGMSCCLNPILYGLNNGIKADL 446
Db 421 HLLGMSCCLNPILYGLNNGIKADL 446
RESULT 8
US-09-962-646-4
; Sequence 4, Application US/09962646
; Patent No. 6818445
; GENERAL INFORMATION:
; APPLICANT: GERALD, CHRISTOPHE P.G.
; APPLICANT: WEINSHANK, RICHARD L.
; APPLICANT: WALKER, MARY W
; APPLICANT: BRANCHEK, THERESA
; TITLE OF INVENTION: MODIFYING FEEDING BEHAVIOR, COMPOUNDS USEFUL IN SUCH METHODS, AND
; FILE REFERENCE: 1795/46166BZA
; CURRENT APPLICATION NUMBER: US/09/962,646
; PRIOR FILING DATE: 2001-09-24
; PRIOR APPLICATION NUMBER: 09/200,673
; PRIOR FILING DATE: 1998-11-25
; PRIOR APPLICATION NUMBER: 08/566,096
; PRIOR FILING DATE: 1995-12-01
; PRIOR APPLICATION NUMBER: 08/349,025
; PRIOR FILING DATE: 1994-12-01
; NUMBER OF SEQ ID NOS: 17
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 4
; LENGTH: 455
; TYPE: PRT
; ORGANISM: Homo Sapiens
US-09-962-646-4
Query Match 88.9%; Score 2326; DB 4; Length 455;
Best Local Similarity 99.6%; Pred. No. 1.5e-168;
Matches 444; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
Qy 1 MSFYSKQDYNMDELDEYNTKLTATENNATATNSDPFVMDYKSSVDDLOQYFLIGLYTF 60
Db 1 MSFYSKQDYNMDELDEYNTKLTATENNATATNSDPFVMDYKSSVDDLOQYFLIGLYTF 60
Qy 61 VSLGFGMGNLLILMALMKRNQKTTVNFIGNLAFSDILVVLFCSPFTLTSLVLLDQWFG 120
Db 61 VSLGFGMGNLLILMALMKRNQKTTVNFIGNLAFSDILVVLFCSPFTLTSLVLLDQWFG 120
Qy 121 KVMCHIMPFCQVSVLSTLILISIAIVRYHMIKHPISNNLTANHGYFLIATVTLGPAI 180
Db 121 KVMCHIMPFCQVSVLSTLILISIAIVRYHMIKHPISNNLTANHGYFLIATVTLGPAI 180
Qy 181 CSPLPVHSLVELQETFGSALLSRYLCSVPWSDSYRIATFISLLVQYILPLVCLTVS 240
Db 181 CSPLPVHSLVELQETFGSALLSRYLCSVPWSDSYRIATFISLLVQYILPLVCLTVS 240
Qy 241 HTSVCRSISCGLSKNENRLEENMINLTLPSSKSGQVKSGLSGHKWSYSFIKHHRRYS 300
Db 241 HTSVCRSISCGLSKNENRLEENMINLTLPSSKSGQVKSGLSGHKWSYSFIKHHRRYS 300
Qy 301 KKTACVLPAPEPQENHSRILPENFGSVRSQSSSKFIPGVPTCFEIKPEENSDVHEL 360
Db 301 KKTACVLPAPEPQENHSRILPENFGSVRSQSSSKFIPGVPTCFEIKPEENSDVHEL 360
Qy 361 RVKRSVTRIKKRSRVFVRLTILILVFAVSNMPLHLFHVVTDFNDNLISNRHFKLVYCIC 420
Db 361 RVKRSVTRIKKRSRVFVRLTILILVFAVSNMPLHLFHVVTDFNDNLISNRHFKLVYCIC 420
Qy 421 HLLGMSCCLNPILYGLNNGIKADL 446

Db 421 HLLGMSCCLNPILYGLNNGIKADL 446
RESULT 9
PCT-US95-15646-4
; Sequence 4, Application PC/TUS9515646
; GENERAL INFORMATION:
; APPLICANT: Synaptic Pharmaceutical Corporation
; TITLE OF INVENTION: METHODS OF MODIFYING FEEDING BEHAVIOR, COMPOUNDS
; TITLE OF INVENTION: USEFUL IN SUCH METHODS, AND DNA ENCODING A HYPOTHALAMIC ATYPIC
; TITLE OF INVENTION: Y/PEPTIDE YY RECEPTOR (Y5) AND USES THEREOF
; NUMBER OF SEQUENCES: 12
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Cooper & Dunham LLP
; STREET: 1185 Avenue of the Americas
; CITY: New York
; STATE: New York
; COUNTRY: United States of America
; ZIP: 10036
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: PCT/US95/15646
; FILING DATE:
; CLASSIFICATION:
; ATTORNEY/AGENT INFORMATION:
; NAME: White, John P.
; REGISTRATION NUMBER: 28,678
; REFERENCE/DOCKET NUMBER: 1795/46166-A-PCT
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (212) 278-0400
; TELEFAX: (212) 391-0525
; INFORMATION FOR SEQ ID NO: 4:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 456 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
PCT-US95-15646-4
Query Match 88.9%; Score 2326; DB 5; Length 456;
Best Local Similarity 99.6%; Pred. No. 1.5e-168;
Matches 444; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
Qy 1 MSFYSKQDYNMDELDEYNTKLTATENNATATNSDPFVMDYKSSVDDLOQYFLIGLYTF 60
Db 1 MSFYSKQDYNMDELDEYNTKLTATENNATATNSDPFVMDYKSSVDDLOQYFLIGLYTF 60
Qy 61 VSLGFGMGNLLILMALMKRNQKTTVNFIGNLAFSDILVVLFCSPFTLTSLVLLDQWFG 120
Db 61 VSLGFGMGNLLILMALMKRNQKTTVNFIGNLAFSDILVVLFCSPFTLTSLVLLDQWFG 120
Qy 121 KVMCHIMPFCQVSVLSTLILISIAIVRYHMIKHPISNNLTANHGYFLIATVTLGPAI 180
Db 121 KVMCHIMPFCQVSVLSTLILISIAIVRYHMIKHPISNNLTANHGYFLIATVTLGPAI 180
Qy 181 CSPLPVHSLVELQETFGSALLSRYLCSVPWSDSYRIATFISLLVQYILPLVCLTVS 240
Db 181 CSPLPVHSLVELQETFGSALLSRYLCSVPWSDSYRIATFISLLVQYILPLVCLTVS 240
Qy 241 HTSVCRSISCGLSKNENRLEENMINLTLPSSKSGQVKSGLSGHKWSYSFIKHHRRYS 300
Db 241 HTSVCRSISCGLSKNENRLEENMINLTLPSSKSGQVKSGLSGHKWSYSFIKHHRRYS 300
Qy 301 KKTACVLPAPEPQENHSRILPENFGSVRSQSSSKFIPGVPTCFEIKPEENSDVHEL 360
Db 301 KKTACVLPAPEPQENHSRILPENFGSVRSQSSSKFIPGVPTCFEIKPEENSDVHEL 360
Qy 361 RVKRSVTRIKKRSRVFVRLTILILVFAVSNMPLHLFHVVTDFNDNLISNRHFKLVYCIC 420

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|||||
Db 361 RVRSRTRIKGRSRVYRUTLILVFAVSWMPHLHFHVVDNFNDNLISNRHFKLVYC 420
|||||
QY 421 HLLGMMSCCLNPILYGLNNGIQDRL 446
|||||
Db 421 HLLGMMSCCLNPILYGLNNGIKADL 446
|||||

RESULT 10
US-08-630-118A-6
; Sequence 6, Application US/08630118A
; Patent No. 5919901
; GENERAL INFORMATION:
; APPLICANT: Hu Ph.D., Yinghe
; APPLICANT: McCaleb Ph.D., Michael L.
; APPLICANT: Bloomquist Ph.D., Brian T.
; APPLICANT: Flores-Riveros Ph.D., Jaime R.
; APPLICANT: Cornfield Ph.D., Linda J.
; TITLE OF INVENTION: Neuropeptide Y Receptor and Nucleic Acid
; TITLE OF INVENTION: Sequences
; NUMBER OF SEQUENCES: 8
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: McDonnell Boehnen Hulbert & Berghoff
; STREET: 300 South Wacker Drive, 32nd Floor
; CITY: Chicago
; STATE: IL
; COUNTRY: USA
; ZIP: 60606
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patentin Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/630,118A
; FILING DATE: April 8, 1996
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Greenfield Ph.D., Michael S.
; REGISTRATION NUMBER: 37,142
; REFERENCE/DOCKET NUMBER: 96,149/WH 405
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (312)715-1000
; TELEFAX: (312)715-1234
; INFORMATION FOR SEQ ID NO: 6:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 445 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; US-08-630-118A-6

Query Match 86.8%; Score 2271; DB 2; Length 445;
Best Local Similarity 99.5%; Pred. No. 2.2e-164;
Matches 434; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 11 MDLEDEYNNKTIATENTNATRNSDPPVWDDYKSSVDDIQYFLIGLYTFVSLLGFMGNL 70
Db 1 MDLEDEYNNKTIATENTNATRNSDPPVWDDYKSSVDDIQYFLIGLYTFVSLLGFMGNL 60
QY 71 LILMALMKKNQKTTVNFNLGNLAFSDILVVLFCSPFTLTSLVLDQWMFGKVMCHIMPFL 130
Db 61 LILMALMKKNQKTTVNFNLGNLAFSDILVVLFCSPFTLTSLVLDQWMFGKVMCHIMPFL 120
QY 131 QCVSVLVSTLILISIAIVRHMVKHPI SNLNTANHG YFLIATVWTLGFAICSPLPVFHSL 190
Db 121 QCVSVLVSTLILISIAIVRHMVKHPI SNLNTANHG YFLIATVWTLGFAICSPLPVFHSL 180
QY 191 VELQETGSSALLSRYLCVSWPSDSYRIAF TISLLLVQYTLPLVCLTVSHTSVCRSISC 250
Db 181 VELQETGSSALLSRYLCVSWPSDSYRIAF TISLLLVQYTLPLVCLTVSHTSVCRSISC 240
QY 251 GLSNKENRLEENEMINLTLPKSKSGPQVKLSGSHKWSYFIKKHRRRYSKKTACVLPAP 310
|||||
Db 241 GLSNKENRLEENEMINLTLPKSKSGPQVKLSGSHKWSYFIKKHRRRYSKKTACVLPAP 300
|||||
QY 311 ERPSQENHSRIILPENFGSVRSQSSSKFIPGVPTCFEIKPEENSDVHELVRKRSVTRIK 370
|||||
Db 301 ERPSQENHSRIILPENFGSVRSQSSSKFIPGVPTCFEIKPEENSDVHELVRKRSVTRIK 360
|||||
QY 371 KRSRSVYFRLTTLILVFAVSWMPHLHFHVVDNFNDNLISNRHFKLVYCICHLLGMMSCCL 430
Db 361 KRSRSVYFRLTTLILVFAVSWMPHLHFHVVDNFNDNLISNRHFKLVYCICHLLGMMSCCL 420
QY 431 NPILYGLNNGIQDRL 446
Db 421 NPILYGLNNGIKADL 436

RESULT 11
US-08-838-399-6
; Sequence 6, Application US/08838399
; Patent No. 5965392
; GENERAL INFORMATION:
; APPLICANT: Hu Ph.D., Yinghe
; APPLICANT: McCaleb Ph.D., Michael L.
; APPLICANT: Bloomquist Ph.D., Brian T.
; APPLICANT: Flores-Riveros Ph.D., Jaime R.
; APPLICANT: Cornfield Ph.D., Linda J.
; TITLE OF INVENTION: Neuropeptide Y Receptor and Nucleic Acid
; TITLE OF INVENTION: Sequences
; NUMBER OF SEQUENCES: 8
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: McDonnell Boehnen Hulbert & Berghoff
; STREET: 300 South Wacker Drive
; CITY: Chicago
; STATE: IL
; COUNTRY: USA
; ZIP: 60606
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patentin Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/838,399
; FILING DATE:
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Greenfield Ph.D., Michael S.
; REGISTRATION NUMBER: 37,147
; REFERENCE/DOCKET NUMBER: 96,149/WH 405
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (312)715-1000
; TELEFAX: (312)715-1234
; INFORMATION FOR SEQ ID NO: 6:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 445 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; US-08-838-399-6

Query Match 86.8%; Score 2271; DB 2; Length 445;
Best Local Similarity 99.5%; Pred. No. 2.2e-164;
Matches 434; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 11 MDLEDEYNNKTIATENTNATRNSDPPVWDDYKSSVDDIQYFLIGLYTFVSLLGFMGNL 70
Db 1 MDLEDEYNNKTIATENTNATRNSDPPVWDDYKSSVDDIQYFLIGLYTFVSLLGFMGNL 60
QY 71 LILMALMKKNQKTTVNFNLGNLAFSDILVVLFCSPFTLTSLVLDQWMFGKVMCHIMPFL 130
Db 61 LILMALMKKNQKTTVNFNLGNLAFSDILVVLFCSPFTLTSLVLDQWMFGKVMCHIMPFL 120
QY 131 QCVSVLVSTLILISIAIVRHMVKHPI SNLNTANHG YFLIATVWTLGFAICSPLPVFHSL 190
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Db 121 QCVSVLSTLILISIAIVRYHMIKHPISNNLTANHGYFLIATVMTLGFACSPPLVPFHS 180
Qy 191 VELOTFGSALLSSRYLCVESWPSDSYRIAFITISILLVQYILPLVCLTVSHTSVCRSISC 250
Db 181 VELOTFGSALLSSRYLCVESWPSDSYRIAFITISILLVQYILPLVCLTVSHTSVCRSISC 240
Qy 251 GLSNKENLEENEMINLTLPSSKSGPQVKLSGSHKWSYFIKHHRRYSKKTACVLPAP 310
Db 241 GLSNKENLEENEMINLTLPSSKSGPQVKLSGSHKWSYFIKHHRRYSKKTACVLPAP 300
Qy 311 ERPSQENHSRILPENFGSVRSQSSSKFIPGVPTCFEIKPEENSVDVHELVRKRSVTRIK 370
Db 301 ERPSQENHSRILPENFGSVRSQSSSKFIPGVPTCFEIKPEENSVDVHELVRKRSVTRIK 360
Qy 371 KRSRSVFYRLTILILVFAVSWMPLHLPHVVTDFNDNLISNRHFKLVYCI CHLLGMMSCCL 430
Db 361 KRSRSVFYRLTILILVFAVSWMPLHLPHVVTDFNDNLISNRHFKLVYCI CHLLGMMSCCL 420
Qy 431 NPILYGLNNGIQORDL 446
Db 421 NPILYGLNNGIKADL 436

RESULT 12
US-09-003-199-21
; Sequence 21, Application US/09003199
; Patent No. 5985616
; GENERAL INFORMATION:
; APPLICANT: Parker, Eric M
; APPLICANT: Strader, Catherine D
; APPLICANT: Rudinski, Mark S
; TITLE OF INVENTION: CHIMERIC MAMMALIAN NPY Y5 RECEPTORS
; NUMBER OF SEQUENCES: 23
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Schering-Plough Corporation
; STREET: 2000 Galloping Hill Road
; CITY: Kenilworth
; STATE: NJ
; COUNTRY: USA
; ZIP: 07033-0530
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: Apple Macintosh
; OPERATING SYSTEM: Macintosh 7.5.3
; SOFTWARE: Microsoft Word 5.1
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/003,199
; FILING DATE:
; CLASSIFICATION:
; ATTORNEY/AGENT INFORMATION:
; NAME: Thampoe, Immac J.
; REGISTRATION NUMBER: 36,322
; REFERENCE/DOCKET NUMBER: CN0775
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (908)298-5061
; TELEFAX: (908)298-5388
; INFORMATION FOR SEQ ID NO: 21:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 445 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-09-003-199-21
Query Match 86.8%; Score 2271; DB 2; Length 445;
Best Local Similarity 99.5%; Pred. No. 2.2e-164;
Matches 434; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
Qy 11 MDLELDYNNKTLATENNATATRSDFPVDYKSSVDDLOQYFLIGLYTFVSLIGFMGNL 70
Db 1 MDLELDYNNKTLATENNATATRSDFPVDYKSSVDDLOQYFLIGLYTFVSLIGFMGNL 60

Qy 71 LILMALMKRQKTTVNFIGNLAFSDILVVLFCSPFTLTSLVLDQWFMGKVMCHIMPFL 130
Db 61 LILMALMKRQKTTVNFIGNLAFSDILVVLFCSPFTLTSLVLDQWFMGKVMCHIMPFL 120
Qy 131 QCVSVLSTLILISIAIVRYHMIKHPISNNLTANHGYFLIATVMTLGFACSPPLVPFHS 190
Db 121 QCVSVLSTLILISIAIVRYHMIKHPISNNLTANHGYFLIATVMTLGFACSPPLVPFHS 180
Qy 191 VELOTFGSALLSSRYLCVESWPSDSYRIAFITISILLVQYILPLVCLTVSHTSVCRSISC 250
Db 181 VELOTFGSALLSSRYLCVESWPSDSYRIAFITISILLVQYILPLVCLTVSHTSVCRSISC 240
Qy 251 GLSNKENLEENEMINLTLPSSKSGPQVKLSGSHKWSYFIKHHRRYSKKTACVLPAP 310
Db 241 GLSNKENLEENEMINLTLPSSKSGPQVKLSGSHKWSYFIKHHRRYSKKTACVLPAP 300
Qy 311 ERPSQENHSRILPENFGSVRSQSSSKFIPGVPTCFEIKPEENSVDVHELVRKRSVTRIK 370
Db 301 ERPSQENHSRILPENFGSVRSQSSSKFIPGVPTCFEIKPEENSVDVHELVRKRSVTRIK 360
Qy 371 KRSRSVFYRLTILILVFAVSWMPLHLPHVVTDFNDNLISNRHFKLVYCI CHLLGMMSCCL 430
Db 361 KRSRSVFYRLTILILVFAVSWMPLHLPHVVTDFNDNLISNRHFKLVYCI CHLLGMMSCCL 420
Qy 431 NPILYGLNNGIQORDL 446
Db 421 NPILYGLNNGIKADL 436

RESULT 13
US-09-235-839-6
; Sequence 6, Application US/09235839
; Patent No. 6207799
; GENERAL INFORMATION:
; APPLICANT: Hu Ph.D., Yinghe
; APPLICANT: McCaleb Ph.D., Michael L.
; APPLICANT: Bloomquist Ph.D., Brian T.
; APPLICANT: Flores-Riveros Ph.D., Jaime R.
; APPLICANT: Cornfield Ph.D., Linda J.
; TITLE OF INVENTION: Neuropeptide Y Receptor and Nucleic Acid
; TITLE OF INVENTION: Sequences
; NUMBER OF SEQUENCES: 8
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: McDonnell Boehen Hulbert & Berghoff
; STREET: 300 South Wacker Drive, 32nd Floor
; CITY: Chicago
; STATE: IL
; COUNTRY: USA
; ZIP: 60606
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/235,839
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/630,118
; FILING DATE: April 8, 1996
; ATTORNEY/AGENT INFORMATION:
; NAME: Greenfield Ph.D., Michael S.
; REGISTRATION NUMBER: 37,142
; REFERENCE/DOCKET NUMBER: 96,149-C
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (312)913-0001
; TELEFAX: (312)913-0002
; INFORMATION FOR SEQ ID NO: 6:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 445 amino acids
; TYPE: amino acid
; TOPOLOGY: linear

Best Local Similarity 99.5%; Pred. No. 2.2e-164;			
Matches 434; Conservative 1; Mismatches 1; Indels 0; Gaps 0;			
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Db	1	MDLEDEYNNKTLATENNATATRN	SDFPWDDYKSSVDDLOVFLIGLYTFVSLGFMGNL 60
Qy	71	LILMALMKRRNQKTTVNF	LIGNLAFSDILVVLFCSPFTLTSVLLDQWFMGKVMCHIMPEFL 130
Db	61	LILMALMKRRNQKTTVNF	LIGNLAFSDILVVLFCSPFTLTSVLLDQWFMGKVMCHIMPEFL 120
Qy	131	QCVSVLVSTLILISIAIVRYHMIKPI	SNLNTANHGYPFIATVWTGLGFAICSPDPVFHSL 190
Db	121	QCVSVLVSTLILISIAIVRYHMIKPI	SNLNTANHGYPFIATVWTGLGFAICSPDPVFHSL 180
Qy	191	VELOETFGSALLSSRYLCVESWPDSYRIAFT	ISILLVQYILPLVCLTVSHTSVCRSISC 250
Db	181	VELOETFGSALLSSRYLCVESWPDSYRIAFT	ISILLVQYILPLVCLTVSHTSVCRSISC 240
Qy	251	GLSNKENRLEENEMINLTLP	SKSGPOVKLSGSHKWSYFIKKHRRYSKKTACVLPAP 310
Db	241	GLSNKENRLEENEMINLTLP	SKSGPOVKLSGSHKWSYFIKKHRRYSKKTACVLPAP 300
Qy	311	ERPSQENHSRILPENFGSVRSQ	SSSKFIPGVPTCFEIKPEENS DVHELVRKRSVTRIK 370
Db	301	ERPSQENHSRILPENFGSVRSQ	SSSKFIPGVPTCFEIKPEENS DVHELVRKRSVTRIK 360
Qy	371	KRSRSVFYRLTILILVFAVSWMPLHL	FHVVTDDNDNLISNRHFKLVYCICHLGMMSCCL 430
Db	361	KRSRSVFYRLTILILVFAVSWMPLHL	FHVVTDDNDNLISNRHFKLVYCICHLGMMSCCL 420
Qy	431	NPILYGLNNGIQRDL	446
Db	421	NPILYGLNNGIKADL	436

Search completed: June 7, 2005, 18:00:19
Job time : 45 secs

GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: June 7, 2005, 17:52:56 ; Search time 149 seconds
(without alignments)
1206.318 Million cell updates/sec

Title: US-09-771-956-9

Perfect score: 2616

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Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 1599520 seqs, 360203123 residues

Total number of hits satisfying chosen parameters: 1599520

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Listing first 45 summaries

Database : Published Applications AA:*

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21: /cgn2_6/ptodata/1/pubpaa/US60_PUBCOMB.pdb.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

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1	2616	100.0	499	9	US-09-771-956-9
2	2326	88.9	455	9	US-09-771-956-13
3	2326	88.9	455	9	US-09-962-646-4
4	2326	88.9	455	14	US-10-013-846-7
5	2326	88.9	455	15	US-10-410-648-7
6	2317	88.6	455	9	US-09-771-956-30
7	2309	88.3	455	14	US-10-274-851-7
8	2285.5	87.4	499	9	US-09-771-956-24
9	2276.5	87.0	508	9	US-09-771-956-22
10	2271	86.8	445	14	US-10-027-049-6
11	2271	86.8	445	14	US-10-225-567A-6
12	2271	86.8	445	15	US-10-295-027-668

13	2271	86.8	445	15	US-10-181-906-14	Sequence 14, Appl
14	2271	86.8	445	16	US-10-686-390-13	Sequence 13, Appl
15	2262	86.5	445	10	US-09-826-509-533	Sequence 533, App
16	2036.5	77.8	456	9	US-09-962-646-2	Sequence 2, Appli
17	2026.5	77.5	445	14	US-10-027-049-4	Sequence 4, Appli
18	2019.5	77.2	445	14	US-10-027-049-2	Sequence 2, Appli
19	1899.5	72.6	394	9	US-09-771-956-10	Sequence 10, Appl
20	1899.5	72.6	394	14	US-10-013-846-17	Sequence 17, Appl
21	1899.5	72.6	394	15	US-10-410-648-17	Sequence 17, Appl
22	1877.5	71.8	394	14	US-10-274-851-17	Sequence 17, Appl
23	1799	68.8	383	9	US-09-771-956-21	Sequence 21, Appl
24	1734.5	66.3	395	9	US-09-771-956-25	Sequence 25, Appl
25	1732	66.2	383	9	US-09-771-956-27	Sequence 27, Appl
26	1621	62.0	334	9	US-09-962-646-6	Sequence 6, Appli
27	1609.5	61.5	350	9	US-09-771-956-6	Sequence 6, Appli
28	1525.5	58.3	341	9	US-09-771-956-20	Sequence 20, Appl
29	1485.5	56.8	352	9	US-09-771-956-23	Sequence 23, Appl
30	1479.5	56.6	341	9	US-09-771-956-26	Sequence 26, Appl
31	771.5	29.5	384	9	US-09-771-956-2	Sequence 2, Appli
32	771.5	29.5	384	10	US-09-393-696-23	Sequence 23, Appl
33	771.5	29.5	384	14	US-10-013-846-4	Sequence 4, Appli
34	771.5	29.5	384	14	US-10-176-847-26	Sequence 26, Appl
35	771.5	29.5	384	14	US-10-225-567A-378	Sequence 378, App
36	771.5	29.5	384	14	US-10-309-515-10	Sequence 10, Appl
37	771.5	29.5	384	14	US-10-177-293-330	Sequence 330, App
38	771.5	29.5	384	14	US-10-060-369-10	Sequence 10, Appl
39	771.5	29.5	384	14	US-10-291-990-31	Sequence 31, Appl
40	771.5	29.5	384	14	US-10-126-764-10	Sequence 10, Appl
41	771.5	29.5	384	15	US-10-295-027-640	Sequence 640, App
42	771.5	29.5	384	15	US-10-295-027-746	Sequence 746, App
43	771.5	29.5	384	15	US-10-410-648-4	Sequence 4, Appli
44	771.5	29.5	384	16	US-10-723-860-2200	Sequence 2200, Ap
45	771.5	29.5	384	16	US-10-686-390-9	Sequence 9, Appli

ALIGNMENTS

RESULT 1

US-09-771-956-9

; Sequence 9, Application US/09771956

; Patent No. US20010031474A1

; GENERAL INFORMATION:

; APPLICANT: Bennett, Michele

; APPLICANT: Brodbeck, Robin

; APPLICANT: Krause, James

; TITLE OF INVENTION: Chimeric Neuropeptide Y Receptors

; FILE REFERENCE: N2000.001

; CURRENT APPLICATION NUMBER: US/09/771.956

; CURRENT FILING DATE: 2001-01-29

; NUMBER OF SEQ ID NOS: 31

; SOFTWARE: PatentIn Ver. 2.1

; SEQ ID NO 9

; LENGTH: 499

; TYPE: PRT

; ORGANISM: Artificial Sequence

; FEATURE:

; OTHER INFORMATION: Description of Artificial Sequence:Y5/Y1 CHIMERA

US-09-771-956-9

Query Match	100.0%;	Score 2616;	DB 9;	Length 499;
Best Local Similarity	100.0%;	Pred. No. 1.7e-214;		
Matches 499;	Conservative 0;	Mismatches 0;	Indels 0;	Gaps 0;
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Db	1	MSFYSKQDYNMDELDEYNNKTATRNDDYKSSVDDLYFLGLTYTF	60	
Qy	61	VSLGFGNLLILMALMKRNQKTTVFLGNLAFSDILVLFCSPTLTSLVDQWFG	120	
Db	61	VSLGFGNLLILMALMKRNQKTTVFLGNLAFSDILVLFCSPTLTSLVDQWFG	120	
Qy	121	KVMCHIMPFLQCVSLVSTLILISIAIVRHMKIPISNNLTANHGYFLIATVTLGFAI	180	

Db 121 KVMCHMPFQCYSVLVSTLILISIAIVRHHMKHPISNNLTANHGYFLIATVMTLGFAL 180
QY 181 CSPLPVFHSIVELQETFGSALLSSRYLCVSWPDSYRIAFTISLLVQVILPLVCLTVS 240
Db 181 CSPLPVFHSIVELQETFGSALLSSRYLCVSWPDSYRIAFTISLLVQVILPLVCLTVS 240
QY 241 HTSVCRSISCGLSNKENRLEENEMINLTLPSPKSGQPVKLSGSHKWSYFIKKHRRYS 300
Db 241 HTSVCRSISCGLSNKENRLEENEMINLTLPSPKSGQPVKLSGSHKWSYFIKKHRRYS 300
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Db 301 KKTACVLPAPERPSQENHNRILPENFGSVRSQSSSKFIPGVPTCFEIKPEENSDVHEL 360
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Db 361 RVKRSVTRIKKRSRVFYRLTILILVFAVSWMPLHLFHVVTDFNDNLISNRHFKLVYCIC 420
QY 421 HLLGMSSCCLNPILYGLFNNGIQORDLQFFNFCDFRSRDDDYETIAMSTMHTDVSKTSLK 480
Db 421 HLLGMSSCCLNPILYGLFNNGIQORDLQFFNFCDFRSRDDDYETIAMSTMHTDVSKTSLK 480
QY 481 QASPVAFKFINNDDNEKI 499
Db 481 QASPVAFKFINNDDNEKI 499
RESULT 2
US-09-771-956-13
; Sequence 13, Application US/09771956
; Patent No. US200100314741
; GENERAL INFORMATION:
; APPLICANT: Bennett, Michele
; APPLICANT: Brodbeck, Robbin
; APPLICANT: Krause, James
; TITLE OF INVENTION: Chimeric Neuropeptide Y Receptors
; FILE REFERENCE: N2000.001
; CURRENT APPLICATION NUMBER: US/09/771,956
; CURRENT FILING DATE: 2001-01-29
; NUMBER OF SEQ ID NOS: 31
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 13
; LENGTH: 455
; TYPE: PRT
; ORGANISM: Homo sapiens
; US-09-771-956-13

Query Match 88.9%; Score 2326; DB 9; Length 455;
Best Local Similarity 99.6%; Pred. No. 8.7e-190;
Matches 444; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
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Db 301 KKTACVLPAPERPSQENHNRILPENFGSVRSQSSSKFIPGVPTCFEIKPEENSDVHEL 360
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QY 421 HLLGMSSCCLNPILYGLFNNGIQORDL 446
Db 421 HLLGMSSCCLNPILYGLFNNGIKADL 446
RESULT 3
US-09-962-646-4
; Sequence 4, Application US/09962646
; Patent No. US20020103123A1
; GENERAL INFORMATION:
; APPLICANT: GERALD, CHRISTOPHE P.G.
; APPLICANT: WEINSHANK, RICHARD L
; APPLICANT: WALKER, MARY W
; APPLICANT: BRANCHEK, THERESA
; TITLE OF INVENTION: MODIFYING FEEDING BEHAVIOR, COMPOUNDS USEFUL IN SUCH METHODS, AND
; FILE REFERENCE: 1795/46166BZA
; CURRENT APPLICATION NUMBER: US/09/962,646
; CURRENT FILING DATE: 2001-09-24
; PRIOR APPLICATION NUMBER: 09/200,673
; PRIOR FILING DATE: 1998-11-25
; PRIOR APPLICATION NUMBER: 08/566,096
; PRIOR FILING DATE: 1995-12-01
; PRIOR APPLICATION NUMBER: 08/349,025
; PRIOR FILING DATE: 1994-12-01
; NUMBER OF SEQ ID NOS: 17
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 4
; LENGTH: 455
; TYPE: PRT
; ORGANISM: Homo Sapiens
; US-09-962-646-4

Query Match 88.9%; Score 2326; DB 9; Length 455;
Best Local Similarity 99.6%; Pred. No. 8.7e-190;
Matches 444; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
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QY 121 KVMCHMPFQCYSVLVSTLILISIAIVRHHMKHPISNNLTANHGYFLIATVMTLGFAL 180
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Db 181 CSPLPVFHSIVELQETFGSALLSSRYLCVSWPDSYRIAFTISLLVQVILPLVCLTVS 240
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QY 421 HLLGMSSCCLNPILYGLFNNGIQORDL 446

Db 421 HLLGMSCLNPILYGLNNGIKADL 446
RESULT 4
US-10-013-846-7
; Sequence 7, Application US/10013846
; Publication No. US20030036652A1
; GENERAL INFORMATION:
; APPLICANT: Bakthavatchalam, Rajagopal
; APPLICANT: Blum, Charles A.
; APPLICANT: Brielmann, Harry L.
; APPLICANT: Darrow, James W.
; APPLICANT: De Lombaert, Stephane
; APPLICANT: Hutchison, Alan
; APPLICANT: Tran, Jennifer
; APPLICANT: Zheng, Xiaozhang
; APPLICANT: Elliott, Richard L.
; APPLICANT: Hammond, Marlys
; TITLE OF INVENTION: Spiro[isobenzofuran-1,4'-piperidin]-3-ones and
; FILE REFERENCE: 3H-spiroisobenzofuran-1,4'-piperidines
; CURRENT APPLICATION NUMBER: US/10/013,846
; PRIOR FILING DATE: 2001-12-11
; PRIOR APPLICATION NUMBER: US 60/254,990
; PRIOR FILING DATE: 2000-12-12
; NUMBER OF SEQ ID NOS: 17
; SOFTWARE: Patent in version 3.1
; SEQ ID NO 7
; LENGTH: 455
; TYPE: PRT
; ORGANISM: homosapiens
US-10-013-846-7

Query Match 88.9%; Score 2326; DB 14; Length 455;
Best Local Similarity 99.6%; Pred. No. 8.7e-190;
Matches 444; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
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Db 1 MSFYSKQDYNMDLEDEYNTKLTATENTATRNSDPFWDDYKSSVDDLOYLGLYTF 60
Qy 61 VSLGFGMNLILMALMKRQKTTVNFNLGNLAFSDILVVLFCSPFTLTSVLLDQWFG 120
Db 61 VSLGFGMNLILMALMKRQKTTVNFNLGNLAFSDILVVLFCSPFTLTSVLLDQWFG 120
Qy 121 KVMCHIMPFLQCVSVLSTLILISIAIVRYHMKHPISNNLTANHGYFLIATVMTLGP 180
Db 121 KVMCHIMPFLQCVSVLSTLILISIAIVRYHMKHPISNNLTANHGYFLIATVMTLGP 180
Qy 181 CSPLPVHSLVLOETFGSALLSRYLCVSWPDSYRIATISILLVQYILPLVCLTVS 240
Db 181 CSPLPVHSLVLOETFGSALLSRYLCVSWPDSYRIATISILLVQYILPLVCLTVS 240
Qy 241 HTSVCRSISCGLSNKENLEENEMINTLHPSKSGQVQLSGSHKWSYFIKHHRRYS 300
Db 241 HTSVCRSISCGLSNKENLEENEMINTLHPSKSGQVQLSGSHKWSYFIKHHRRYS 300
Qy 301 KKTACVLPAPEPSPQENHSRILPENFGSVRSQSSSKFIPGVPTCFEIKPEENS DVHEL 360
Db 301 KKTACVLPAPEPSPQENHSRILPENFGSVRSQSSSKFIPGVPTCFEIKPEENS DVHEL 360
Qy 361 RVKRSVTRIKKRSRVFYRLTILILVFAVSWMPHLHVVTDNDNLISNRHFKLVYCIC 420
Db 361 RVKRSVTRIKKRSRVFYRLTILILVFAVSWMPHLHVVTDNDNLISNRHFKLVYCIC 420
Qy 421 HLLGMSCLNPILYGLNNGIQORDL 446
Db 421 HLLGMSCLNPILYGLNNGIKADL 446

RESULT 5
US-10-410-648-7

; Sequence 7, Application US/10410648
; Publication No. US20040072847A1
; GENERAL INFORMATION:
; APPLICANT: Bakthavatchalam, Rajagopal
; APPLICANT: Blum, Charles A.
; APPLICANT: Brielmann, Harry L.
; APPLICANT: Darrow, James W.
; APPLICANT: De Lombaert, Stephane W.
; APPLICANT: Hutchinson, Alan W.
; APPLICANT: Tran, Jennifer W.
; APPLICANT: Zheng, Xiaozhang W.
; APPLICANT: Elliott, Richard L.
; APPLICANT: Hammond, Marlys L.
; TITLE OF INVENTION: SPIRO[ISOBENZOFURAN-1,4'-PIPERIDIN]-3-ONES AND
; FILE REFERENCE: U 014539-7
; CURRENT APPLICATION NUMBER: US/10/410,648
; CURRENT FILING DATE: 2003-04-09
; PRIOR FILING DATE: 2001-12-11
; PRIOR APPLICATION NUMBER: 60/254,990
; PRIOR FILING DATE: 2000-12-12
; NUMBER OF SEQ ID NOS: 17
; SOFTWARE: Patent in version 3.1
; SEQ ID NO 7
; LENGTH: 455
; TYPE: PRT
; ORGANISM: homo sapiens
US-10-410-648-7

Query Match 88.9%; Score 2326; DB 15; Length 455;
Best Local Similarity 99.6%; Pred. No. 8.7e-190;
Matches 444; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
Qy 1 MSFYSKQDYNMDLEDEYNTKLTATENTATRNSDPFWDDYKSSVDDLOYLGLYTF 60
Db 1 MSFYSKQDYNMDLEDEYNTKLTATENTATRNSDPFWDDYKSSVDDLOYLGLYTF 60
Qy 61 VSLGFGMNLILMALMKRQKTTVNFNLGNLAFSDILVVLFCSPFTLTSVLLDQWFG 120
Db 61 VSLGFGMNLILMALMKRQKTTVNFNLGNLAFSDILVVLFCSPFTLTSVLLDQWFG 120
Qy 121 KVMCHIMPFLQCVSVLSTLILISIAIVRYHMKHPISNNLTANHGYFLIATVMTLGP 180
Db 121 KVMCHIMPFLQCVSVLSTLILISIAIVRYHMKHPISNNLTANHGYFLIATVMTLGP 180
Qy 181 CSPLPVHSLVLOETFGSALLSRYLCVSWPDSYRIATISILLVQYILPLVCLTVS 240
Db 181 CSPLPVHSLVLOETFGSALLSRYLCVSWPDSYRIATISILLVQYILPLVCLTVS 240
Qy 241 HTSVCRSISCGLSNKENLEENEMINTLHPSKSGQVQLSGSHKWSYFIKHHRRYS 300
Db 241 HTSVCRSISCGLSNKENLEENEMINTLHPSKSGQVQLSGSHKWSYFIKHHRRYS 300
Qy 301 KKTACVLPAPEPSPQENHSRILPENFGSVRSQSSSKFIPGVPTCFEIKPEENS DVHEL 360
Db 301 KKTACVLPAPEPSPQENHSRILPENFGSVRSQSSSKFIPGVPTCFEIKPEENS DVHEL 360
Qy 361 RVKRSVTRIKKRSRVFYRLTILILVFAVSWMPHLHVVTDNDNLISNRHFKLVYCIC 420
Db 361 RVKRSVTRIKKRSRVFYRLTILILVFAVSWMPHLHVVTDNDNLISNRHFKLVYCIC 420
Qy 421 HLLGMSCLNPILYGLNNGIQORDL 446
Db 421 HLLGMSCLNPILYGLNNGIKADL 446

RESULT 6
US-09-771-956-30
; Sequence 30, Application US/09771956
; Patent No. US20010031474A1
; GENERAL INFORMATION:
; APPLICANT: Bennett, Michele

```
; APPLICANT: Brodbeck, Robbin
; APPLICANT: Krause, James
; TITLE OF INVENTION: Chimeric Neuropeptide Y Receptors
; FILE REFERENCE: N2000.001
; CURRENT APPLICATION NUMBER: US/09/771,956
; CURRENT FILING DATE: 2001-01-29
; NUMBER OF SEQ ID NOS: 31
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 30
; TYPE: PRT
; LENGTH: 455
; ORGANISM: Cercopithecus aethiops
US-09-771-956-30

; Query Match      88.6%; Score 2317; DB 9; Length 455;
Best Local Similarity 99.1%; Pred. No. 5.1e-189;
Matches 442; Conservative 2; Mismatches 2; Indels 0; Gaps 0;

QY 1 MSFYSKQDYNMDELDDEYNNKTLATENNNTAATRNSDFPVWDDYKSSVDDIQLYFLIGLYTF 60
Db 1 MSFYSKQDYNMDELDDEYNNKTLATENNNTAATRNSDFPVWDDYKSSVDDIQLYFLIGLYTF 60
QY 61 VSLGFGMGNLLILMALMKRNQKTTVNFILGNLAFSDILVVLFCSPFTLTSVLLDQWMFG 120
Db 61 VSLGFGMGNLLILMALMKRNQKTTVNFILGNLAFSDILVVLFCSPFTLTSVLLDQWMFG 120
QY 121 KVMCHIMPFLQCVSVLVSTLILISIAIVRYHMIKHPISNNLTANHGYFLIATVWTLGFAI 180
Db 121 KVMCHIMPFLQCVSVLVSTLILISIAIVRYHMIKHPISNNLTANHGYFLIATVWTLGFAI 180
QY 181 CSPLPVFHSLVELQETFGSALLSSRYLCVSWPDSYRIAFITISLLLVQVILPLVCLTVS 240
Db 181 CSPLPVFHSLVELQETFGSALLSSRYLCVSWPDSYRIAFITISLLLVQVILPLVCLTVS 240
QY 241 HTSVCRSISCGLSNKENRLEENEMINLTLPSSKSGPQVKLSGSHKWSYFIKKHRRYS 300
Db 241 HTSVCRSISCGLSNKENRLEENEMINLTLPSSKSGPQVKLSGSHKWSYFIKKHRRYS 300
QY 301 KKTACVLPAPERPSQENHSRIILPENFGSVRSQSSSKFTIPGVPTCTFEIKPEENSDVHEL 360
Db 301 KKTACVLPAPERPSQENHSRIILPENFGSVRSQSSSKFTIPGVPTCTFEIKPEENSDVHEL 360
QY 361 RVKRSVTRIKKRSRVFYRTLILVFAVSWMPHLHFHVVTDFNDNLISNRHFKLVYCIC 420
Db 361 RVKRSVTRIKKRSRVFYRTLILVFAVSWMPHLHFHVVTDFNDNLISNRHFKLVYCIC 420
QY 421 HLLGMMSCCLNPILYGLFNNGIQORDL 446
Db 421 HLLGMMSCCLNPILYGLFNNGIKADL 446

RESULT 7
US-10-274-851-7
; Sequence 7, Application US/10274851
; Publication No. US20030144290A1
; GENERAL INFORMATION:
; APPLICANT: Blum, Charles
; APPLICANT: Brielmann, Harry
; APPLICANT: De Lombaert, Stephane
; APPLICANT: Zheng, Xiaozhang
; TITLE OF INVENTION: SUBSTITUTE 2-CYCLOHEXYL-4-PHENYL-1H-IMIDAZOLE
; TITLE OF INVENTION: DERIVATIVES
; FILE REFERENCE: U 014209-8
; CURRENT APPLICATION NUMBER: US/10/274,851
; CURRENT FILING DATE: 2002-10-21
; NUMBER OF SEQ ID NOS: 17
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 7
; TYPE: PRT
; LENGTH: 455
; ORGANISM: Homo sapiens
US-10-274-851-7

; APPLICANT: Brodbeck, Robbin
; APPLICANT: Krause, James
; TITLE OF INVENTION: Chimeric Neuropeptide Y Receptors
; FILE REFERENCE: N2000.001
; CURRENT APPLICATION NUMBER: US/09/771,956
; CURRENT FILING DATE: 2001-01-29
; NUMBER OF SEQ ID NOS: 31
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 24
; TYPE: PRT
; LENGTH: 499
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence:Y1/Y5 CHIMERA
US-09-771-956-24

; Query Match      87.4%; Score 2285.5; DB 9; Length 499;
Best Local Similarity 88.9%; Pred. No. 2.8e-186;
Matches 439; Conservative 22; Mismatches 30; Indels 3; Gaps 3;

QY 7 QDYNMDELDDEYNNKTLATENNNTAATRNSDFPVWDDYKSSVDDIQLYFLIGLYTFVSLGLF 66
Db 8 QDSMEFKLEEHPNKTFTVTENNNTAAARNAAPAWEDYRGSDVDDQLQYFLIGLYTFVSLGLF 67
QY 67 MGNLLILMALMKRNQKTTVNFILGNLAFSDILVVLFCSPFTLTSVLLDQWMFGKVMCHI 126
Db 68 MGNLLILMAVMKKRNQKTTVNFILGNLAFSDILVVLFCSPFTLTSVLLDQWMFGKVMCHI 127
QY 127 MPFLQCVSVLVSTLILISIAIVRYHMIKHPISNNLTANHGYFLIATVWTLGFAICSPLPV 186
Db 127 MPFLQCVSVLVSTLILISIAIVRYHMIKHPISNNLTANHGYFLIATVWTLGFAICSPLPV 186

; APPLICANT: Brodbeck, Robbin
; APPLICANT: Krause, James
; TITLE OF INVENTION: Chimeric Neuropeptide Y Receptors
; FILE REFERENCE: N2000.001
; CURRENT APPLICATION NUMBER: US/09/771,956
; CURRENT FILING DATE: 2001-01-29
; NUMBER OF SEQ ID NOS: 31
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 24
; TYPE: PRT
; LENGTH: 499
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence:Y1/Y5 CHIMERA
US-09-771-956-24

; Query Match      88.3%; Score 2309; DB 14; Length 455;
Best Local Similarity 99.1%; Pred. No. 2.4e-188;
Matches 442; Conservative 1; Mismatches 3; Indels 0; Gaps 0;

QY 1 MSFYSKQDYNMDELDDEYNNKTLATENNNTAATRNSDFPVWDDYKSSVDDIQLYFLIGLYTF 60
Db 1 MSFYSKQDYNMDELDDEYNNKTLATENNNTAATRNSDFPVWDDYKSSVDDIQLYFLIGLYTF 60
QY 61 VSLGFGMGNLLILMALMKRNQKTTVNFILGNLAFSDILVVLFCSPFTLTSVLLDQWMFG 120
Db 61 VSLGFGMGNLLILMALMKRNQKTTVNFILGNLAFSDILVVLFCSPFTLTSVLLDQWMFG 120
QY 121 KVMCHIMPFLQCVSVLVSTLILISIAIVRYHMIKHPISNNLTANHGYFLIATVWTLGFAI 180
Db 121 KVMCHIMPFLQCVSVLVSTLILISIAIVRYHMIKHPISNNLTANHGYFLIATVWTLGFAI 180
QY 181 CSPLPVFHSLVELQETFGSALLSSRYLCVSWPDSYRIAFITISLLLVQVILPLVCLTVS 240
Db 181 CSPLPVFHSLVELQETFGSALLSSRYLCVSWPDSYRIAFITISLLLVQVILPLVCLTVS 240
QY 241 HTSVCRSISCGLSNKENRLEENEMINLTLPSSKSGPQVKLSGSHKWSYFIKKHRRYS 300
Db 241 HTSVCRSISCGLSNKENRLEENEMINLTLPSSKSGPQVKLSGSHKWSYFIKKHRRYS 300
QY 301 KKTACVLPAPERPSQENHSRIILPENFGSVRSQSSSKFTIPGVPTCTFEIKPEENSDVHEL 360
Db 301 KKTACVLPAPERPSQENHSRIILPENFGSVRSQSSSKFTIPGVPTCTFEIKPEENSDVHEL 360
QY 361 RVKRSVTRIKKRSRVFYRTLILVFAVSWMPHLHFHVVTDFNDNLISNRHFKLVYCIC 420
Db 361 RVKRSVTRIKKRSRVFYRTLILVFAVSWMPHLHFHVVTDFNDNLISNRHFKLVYCIC 420
QY 421 HLLGMMSCCLNPILYGLFNNGIQORDL 446
Db 421 HLLGMMSCCLNPILYGLFNNGIKADL 446

RESULT 8
US-09-771-956-24
; Sequence 24, Application US/09771956
; Patent No. US20010031474A1
; GENERAL INFORMATION:
; APPLICANT: Bennett, Michele
; APPLICANT: Brodbeck, Robbin
; APPLICANT: Krause, James
; TITLE OF INVENTION: Chimeric Neuropeptide Y Receptors
; FILE REFERENCE: N2000.001
; CURRENT APPLICATION NUMBER: US/09/771,956
; CURRENT FILING DATE: 2001-01-29
; NUMBER OF SEQ ID NOS: 31
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 24
; TYPE: PRT
; LENGTH: 499
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence:Y1/Y5 CHIMERA
US-09-771-956-24
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Db 128 MPFLQCVSVLSTLILSTAIIVRYHMKHPIISNNLTANHGYFLIATVMTLGFALCPLPV 187
Qy 187 FHSVLQLOFTFGSALLSSRYLCVSWPDSYRIAFTISILLVQYILPLVCLTVSHTSVCR 246
Db 188 FHSVLQLOFTFGSALLSSRYLCVSWPDSYRIAFTISILLVQYILPLVCLTVSHTSVCR 247
Qy 247 SISGLSKENKLENEMINLTLPSSKSGKSGPQVLSGSHKWSYFIKHHRRYSKKTACV 306
Db 248 SISGLSKENKLENEMINLTLPSSKSGKSGPQVLSGSHKWSYFIKHHRRYSKKTACV 307
Qy 307 LPAPERBQENHSHRILPENFGSVRSQSSSKFIQVPTCFEIKPEENSDFVHELKRSV 366
Db 308 LPAPAGPQGRHLAV-PENPASVRSQSSSKFIQVPTCFEIKPEENSDFVHELKRSV 366
Qy 367 TRIKRSRSVFYRLTILILVFAVSWMPLHLFHVVDTFDNDNLISNRHFKLVYICHLGLWM 426
Db 367 TRIKRSRSVFYRLTILILVFAVSWMPLHLFHVVDTFDNDNLISNRHFKLVYICHLGLWM 426
Qy 427 SCCLNPILYGLNNGI-QRDLOFFNFCDFRSRDDDYETIAMSTMHTDVSKTSLKQASPV 485
Db 427 SCCLNPILYGLNNGI-QRDLOFFNFCDFRSRDDDYETIAMSTMHTDVSKTSLKQASPV 486
Qy 486 AFKINNNDNEKI 499
Db 487 AFKISMN-DNEKI 499

RESULT 9

US-09-771-956-22
; Sequence 22, Application US/09771956
; Patent No. US20010031474A1
; GENERAL INFORMATION:
; APPLICANT: Bennett, Michele
; APPLICANT: Brodbeck, Robbin
; APPLICANT: Krause, James
; TITLE OF INVENTION: Chimeric Neuropeptide Y Receptors
; FILE REFERENCE: N2000.001
; CURRENT APPLICATION NUMBER: US/09/771,956
; CURRENT FILING DATE: 2001-01-29
; NUMBER OF SEQ ID NOS: 31
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 22
; LENGTH: 508
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Y1/Y5 CHIMERA
US-09-771-956-22

Query Match 87.0%; Score 2276.5; DB 9; Length 508;
Best Local Similarity 85.9%; Pred. No. 1.7e-185;
Matches 438; Conservative 24; Mismatches 25; Indels 23; Gaps 3;
Qy 11 MDLEDEYNNKTLATENNNTAAT-----RNSDFPVDYKSSVDD 49
Db 1 MEVLEEHNKTFVTENNTAASQNTASPAWEDYRGTEENNTSAARNTAFPMEDYRGVDD 60
Qy 50 LOYFLIGLYTFVSLGFMGNLILMALMKRKNQKTTVNFGLNLAFLSDILVFLCSPFTL 109
Db 61 LOYFLIGLYTFVSLGFMGNLILMALMKRKNQKTTVNFGLNLAFLSDILVFLCSPFTL 120
Qy 110 TSVLLDQWFMGKVMCHIMPFFQCQSVLVSTLILISIAIVRYHMKHPIISNNLTANHGYFL 169
Db 121 TSVLLDQWFMGKVMCHIMPFFQCQSVLVSTLILISIAIVRYHMKHPIISNNLTANHGYFL 180
Qy 170 IATVMTLGFALCPLVPVHSLVLOFTFGSALLSSRYLCVSWPDSYRIAFTISILLVQ 229
Db 181 IATVMTLGFALCPLVPVHSLVLOFTFGSALLSSRYLCVSWPDSYRIAFTISILLVQ 240
Qy 230 YILPLVCLTVSHTSVCRSISGLSKENKLENEMINLTLPSSKSGKSGPQVLSGSHKWSY 289
Db 241 YILPLVCLTVSHTSVCRSISGLSKENKLENEMINLTLPSSKSGKSGPQVLSGSHKWSY 300

Qy 230 SFIKKRRYRSKKTACVLPAPERBQENHSHRILPENFGSVRSQSSSKFIQVPTCFE 349
Db 301 SFIKKRRYRSKKTACVLPAPERBQENHSHRILPENFGSVRSQSSSKFIQVPTCFE 359
Qy 350 KPEENSDFVHELKRSVTRIKRKRSVFYRLTILILVFAVSWMPLHLFHVVDTFDNDNLIS 409
Db 360 KPEENSDFVHELKRSVTRIKRKRSVFYRLTILILVFAVSWMPLHLFHVVDTFDNDNLIS 419
Qy 410 NRHFKLVYICHLGLWMSCCLNPILYGLNNGIQRDLOFFNFCDFRSRDDDYETIAMST 469
Db 420 NRHFKLVYICHLGLWMSCCLNPILYGLNNGIQRDLOFFNFCDFRSRDDDYETIAMST 479
Qy 470 MHTDVSKTSLKQASPVAFKINNNDNEKI 499
Db 480 MHTDVSKTSLKQASPVAFKISMN-DNEKV 508

RESULT 10

US-10-027-049-6
; Sequence 6, Application US/10027049
; Publication No. US2003002283A1
; GENERAL INFORMATION:
; APPLICANT: Hu Ph.D., Yinghe
; McCaleb Ph.D., Michael L.
; Bloomquist Ph.D., Brian T.
; Flores-Riveros Ph.D., Jaime R.
; Cornfield Ph.D., Linda J.
; TITLE OF INVENTION: Neuropeptide Y Receptor and Nucleic Acid
; NUMBER OF SEQUENCES: 8
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: McDonnell Boehnen Hulbert & Berghoff
; STREET: 300 South Wacker Drive, 32nd Floor
; CITY: Chicago
; STATE: IL
; COUNTRY: USA
; ZIP: 60606
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/10/027,049
; FILING DATE: 08-Apr-1996
; CLASSIFICATION: <unknown>
; ATTORNEY/AGENT INFORMATION:
; NAME: Greenfield Ph.D., Michael S.
; REGISTRATION NUMBER: 37,142
; REFERENCE/DOCKET NUMBER: 96,149/WH 405
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (312)715-1000
; TELEFAX: (312)715-1234
; INFORMATION FOR SEQ ID NO: 6:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 445 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; SEQUENCE DESCRIPTION: SEQ ID NO: 6:

US-10-027-049-6

Query Match 86.8%; Score 2271; DB 14; Length 445;
Best Local Similarity 99.5%; Pred. No. 4.2e-185;
Matches 434; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
Qy 11 MDLEDEYNNKTLATENNNTAATRNSDFPVWDYKSSVDDLOQYFLIGLYTFVSLGFMGNL 70
Db 1 MDLEDEYNNKTLATENNNTAATRNSDFPVWDYKSSVDDLOQYFLIGLYTFVSLGFMGNL 60
Qy 71 LILMALMKRKNQKTTVNFGLNLAFLSDILVFLCSPFTLTSVLLDQWFMGKVMCHIMPFL 130
Db 61 LILMALMKRKNQKTTVNFGLNLAFLSDILVFLCSPFTLTSVLLDQWFMGKVMCHIMPFL 120

QY	131	QCYSVLVSTLILISIAIVRYHMIKPI	SNLNTANHGYFLIATVWTGLGFAICSP	190
Db	121	QCYSVLVSTLILISIAIVRYHMIKEP	ISNNLTANHGYFLIATVWTGLGFAICSP	180
QY	191	VELOETFGSALLSSRYLCVESWPSDSYRIAFTISLLVQYILPLVCLTVSHTSVCSRISC	250	
Db	181	VELOETFGSALLSSRYLCVESWPSDSYRIAFTISLLVQYILPLVCLTVSHTSVCSRISC	240	
QY	251	GLSNKENRLEENEMINLTLPSSKSGPOVKLSGSHKWSYFIKKHRRYSKKTACVLPAP	310	
Db	241	GLSNKENRLEENEMINLTLPSSKSGPOVKLSGSHKWSYFIKKHRRYSKKTACVLPAP	300	
QY	311	ERPSQENHSRILPENFGSVRSQSSSKFIPGVTCTFEIKPEENSDVHELVRKRSVTRIK	370	
Db	301	ERPSQENHSRILPENFGSVRSQSSSKFIPGVTCTFEIKPEENSDVHELVRKRSVTRIK	360	
QY	371	KRSRSVFYRLTILILVFAVSWMPLHLFHVVTDFNDNLISNRHFKLVYCI	CHLLGMMSCCL 430	
Db	361	KRSRSVFYRLTILILVFAVSWMPLHLFHVVTDFNDNLISNRHFKLVYCI	CHLLGMMSCCL 420	
QY	431	NPILYGFLLNGIQIDL	446	
Db	421	NPILYGFLLNGIKADL	436	
RESULT 11				
US-10-225-567A-205				
; Sequence 205, Application US/10225567A				
; Publication No. US20030113798A1				
; GENERAL INFORMATION:				
; APPLICANT: LifeSpan Biosciences				
; APPLICANT: Brown, Joseph P.				
; APPLICANT: Burmer, Glenna C.				
; APPLICANT: Roush, Christine L.				
; TITLE OF INVENTION: ANTIGENIC PEPTIDES AND ANTIBODIES FOR G PROTEIN-COUPLED RECEPTORS				
; FILE REFERENCE: 1920-4-4				
; CURRENT APPLICATION NUMBER: US/10/225.567A				
; CURRENT FILING DATE: 2001-12-19				
; PRIOR APPLICATION NUMBER: 60/257,144				
; PRIOR FILING DATE: 2000-12-19				
; NUMBER OF SEQ ID NOS: 2292				
; SOFTWARE: PatentIn version 3.1				
; SEQ ID NO 205				
; LENGTH: 445				
; TYPE: PRT				
; ORGANISM: Homo sapiens				
US-10-225-567A-205				
Query Match 86.8%; Score 2271; DB 14; Length 445;				
Best Local Similarity 99.5%; Pred. No. 4.2e-185;				
Matches 434; Conservative 1; Mismatches 1; Indels 0; Gaps 0;				
QY	11	MDLEDEYVNTKLTATENNNTAATRN	SDFPVDDYKSSVDDDLQYFLIGLYTFVSLIGFMGNL	70
Db	1	MDLEDEYVNTKLTATENNNTAATRN	SDFPVDDYKSSVDDDLQYFLIGLYTFVSLIGFMGNL	60
QY	71	LILMALMKRNQKTTVNFILGNLAFSD	ILVLFCSPPFTLTSVLLDQWFGKVMCHIMPFL	130
Db	61	LILMALMKRNQKTTVNFILGNLAFSD	ILVLFCSPPFTLTSVLLDQWFGKVMCHIMPFL	120
QY	131	QCYSVLVSTLILISIAIVRYHMIKPI	SNLNTANHGYFLIATVWTGLGFAICSP	190
Db	121	QCYSVLVSTLILISIAIVRYHMIKEP	ISNNLTANHGYFLIATVWTGLGFAICSP	180
QY	191	VELOETFGSALLSSRYLCVESWPSDSYRIAFTISLLVQYILPLVCLTVSHTSVCSRISC	250	
Db	181	VELOETFGSALLSSRYLCVESWPSDSYRIAFTISLLVQYILPLVCLTVSHTSVCSRISC	240	
QY	251	GLSNKENRLEENEMINLTLPSSKSGPOVKLSGSHKWSYFIKKHRRYSKKTACVLPAP	310	
Db	241	GLSNKENRLEENEMINLTLPSSKSGPOVKLSGSHKWSYFIKKHRRYSKKTACVLPAP	300	

QY	311	ERPSQENHSRILPENFGSVRSQSSSKFIPGVPTCFEIKPEENSDVHELVRKRSVTRIK	370
Db	301	ERPSQENHSRILPENFGSVRSQSSSKFIPGVPTCFEIKPEENSDVHELVRKRSVTRIK	360
QY	371	KRSRSVFYRLTILILVFAVSWMPLHLFHVVTDFNDNLISNRHFKLVYCI	CHLLGMMSCCL 430
Db	361	KRSRSVFYRLTILILVFAVSWMPLHLFHVVTDFNDNLISNRHFKLVYCI	CHLLGMMSCCL 420
QY	431	NPILYGFLLNGIQIDL	446
Db	421	NPILYGFLLNGIKADL	436
RESULT 12			
US-10-295-027-668			
; Sequence 668, Application US/10295027			
; Publication No. US20030232350A1			
; GENERAL INFORMATION:			
; APPLICANT: Afar, Daniel			
; APPLICANT: Aziz, Natasha			
; APPLICANT: Ginsberg, Wendy M.			
; APPLICANT: Gish, Kurt C.			
; APPLICANT: Glynnne, Richard			
; APPLICANT: Hevezi, Peter A.			
; APPLICANT: Mack, David H.			
; APPLICANT: Murray, Richard			
; APPLICANT: Watson, Susan R.			
; APPLICANT: Eos Biotechnology, Inc.			
; TITLE OF INVENTION: Methods of Diagnosis of Cancer, Compositions and			
; FILE REFERENCE: 018501-012500US			
; CURRENT APPLICATION NUMBER: US/10/295,027			
; CURRENT FILING DATE: 2002-11-13			
; PRIOR APPLICATION NUMBER: US 09/663,733			
; PRIOR FILING DATE: 2000-09-15			
; PRIOR APPLICATION NUMBER: US 60/350,666			
; PRIOR FILING DATE: 2001-11-13			
; PRIOR APPLICATION NUMBER: US 60/335,394			
; PRIOR FILING DATE: 2001-11-15			
; PRIOR APPLICATION NUMBER: US 60/332,464			
; PRIOR FILING DATE: 2001-11-21			
; PRIOR APPLICATION NUMBER: US 60/334,393			
; PRIOR FILING DATE: 2001-11-29			
; PRIOR APPLICATION NUMBER: US 60/340,376			
; PRIOR FILING DATE: 2001-12-14			
; PRIOR APPLICATION NUMBER: US 60/347,211			
; PRIOR FILING DATE: 2002-01-08			
; PRIOR APPLICATION NUMBER: US 60/347,349			
; PRIOR FILING DATE: 2002-01-10			
; PRIOR APPLICATION NUMBER: US 60/355,250			
; PRIOR FILING DATE: 2002-02-08			
; PRIOR APPLICATION NUMBER: US 60/356,714			
; PRIOR FILING DATE: 2002-02-13			
; Remaining Prior Application data removed - See File Wrapper or PALM.			
; NUMBER OF SEQ ID NOS: 1386			
; SOFTWARE: PatentIn Ver. 2.1			
; SEQ ID NO 668			
; LENGTH: 445			
; TYPE: PRT			
; ORGANISM: Homo sapiens			
US-10-295-027-668			
Query Match 86.8%; Score 2271; DB 15; Length 445;			
Best Local Similarity 99.5%; Pred. No. 4.2e-185;			
Matches 434; Conservative 1; Mismatches 1; Indels 0; Gaps 0;			
QY	11	MDLEDEYVNTKLTATENNNTAATRN	SDFPVDDYKSSVDDDLQYFLIGLYTFVSLIGFMGNL 70
Db	1	MDLEDEYVNTKLTATENNNTAATRN	SDFPVDDYKSSVDDDLQYFLIGLYTFVSLIGFMGNL 60
QY	71	LILMALMKRNQKTTVNFILGNLAFSD	ILVLFCSPPFTLTSVLLDQWFGKVMCHIMPFL 130
Db	61	LILMALMKRNQKTTVNFILGNLAFSD	ILVLFCSPPFTLTSVLLDQWFGKVMCHIMPFL 120

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QY 131 QCVSVLVSTLILISIAIVRYHMIKHPISNNLTANHGYFLIATVTLGFAICSPPLVFHSL 190
Db 121 QCVSVLVSTLILISIAIVRYHMIKHPISNNLTANHGYFLIATVTLGFAICSPPLVFHSL 180
QY 191 VELOTFGSALLSSRYLCVESWPDSYRIAFITISLLVQYILPLVCLTVSHTSVCRSISC 250
Db 181 VELOTFGSALLSSRYLCVESWPDSYRIAFITISLLVQYILPLVCLTVSHTSVCRSISC 240
QY 251 GLSNKENLEENEMINLTLPSSKSGPOVKLSGSHKWSYFIKKHRRYSKKTACVLPAP 310
Db 241 GLSNKENLEENEMINLTLPSSKSGPOVKLSGSHKWSYFIKKHRRYSKKTACVLPAP 300
QY 311 ERPSQENHSRILPENFGSVRSQSSSKFIPGVPTCFEIKPEENSDVHELVRKRSVTRIK 370
Db 301 ERPSQENHSRILPENFGSVRSQSSSKFIPGVPTCFEIKPEENSDVHELVRKRSVTRIK 360
QY 371 KRSRSVFYRLTILILVFAVSWMPLHLFHVVTDFNDNLISNRHFKLVYICICHLGMMSCCL 430
Db 361 KRSRSVFYRLTILILVFAVSWMPLHLFHVVTDFNDNLISNRHFKLVYICICHLGMMSCCL 420
QY 431 NPILYGLFLNNGIORDL 446
Db 421 NPILYGLFLNNGIKADL 436

RESULT 13
US-10-181-906-14
; Sequence 14, Application US/10181906
; Publication No. US20040053864A1
; GENERAL INFORMATION:
; APPLICANT: Karsenty, Gerard
; APPLICANT: Amling, Michael
; APPLICANT: Dacy, Patricia
; TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR CONTROL OF BONE FORMATION VIA
; TITLE OF INVENTION: MODULATION OF NEUROPEPTIDE Y ACTIVITY
; FILE REFERENCE: 9142-020-999
; CURRENT APPLICATION NUMBER: US/10/181.906
; CURRENT FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US01/02040
; PRIOR FILING DATE: 2001-01-22
; NUMBER OF SEQ ID NOS: 16
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 14
; LENGTH: 445
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-181-906-14

Query Match 86.8%; Score 2271; DB 15; Length 445;
Best Local Similarity 99.5%; Pred. No. 4.2e-185;
Matches 434; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 11 MDLEDEYNNKTATENNATATRNDDFPVDDYKSSVDDLOQYFLIGLYTFVSLLGFMGNL 70
Db 1 MDLEDEYNNKTATENNATATRNDDFPVDDYKSSVDDLOQYFLIGLYTFVSLLGFMGNL 60
QY 71 LILMALMKRNQKTTNVNFIENLAFSDILVLFCSPTLTSLVLDQWFGKVMCHIMPFL 130
Db 61 LILMALMKRNQKTTNVNFIENLAFSDILVLFCSPTLTSLVLDQWFGKVMCHIMPFL 120
QY 131 QCVSVLVSTLILISIAIVRYHMIKHPISNNLTANHGYFLIATVTLGFAICSPPLVFHSL 190
Db 121 QCVSVLVSTLILISIAIVRYHMIKHPISNNLTANHGYFLIATVTLGFAICSPPLVFHSL 180
QY 191 VELOTFGSALLSSRYLCVESWPDSYRIAFITISLLVQYILPLVCLTVSHTSVCRSISC 250
Db 181 VELOTFGSALLSSRYLCVESWPDSYRIAFITISLLVQYILPLVCLTVSHTSVCRSISC 240
QY 251 GLSNKENLEENEMINLTLPSSKSGPOVKLSGSHKWSYFIKKHRRYSKKTACVLPAP 310
Db 241 GLSNKENLEENEMINLTLPSSKSGPOVKLSGSHKWSYFIKKHRRYSKKTACVLPAP 300
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QY 311 ERPSQENHSRILPENFGSVRSQSSSKFIPGVPTCFEIKPEENSDVHELVRKRSVTRIK 370
Db 301 ERPSQENHSRILPENFGSVRSQSSSKFIPGVPTCFEIKPEENSDVHELVRKRSVTRIK 360
QY 371 KRSRSVFYRLTILILVFAVSWMPLHLFHVVTDFNDNLISNRHFKLVYICICHLGMMSCCL 430
Db 361 KRSRSVFYRLTILILVFAVSWMPLHLFHVVTDFNDNLISNRHFKLVYICICHLGMMSCCL 420
QY 431 NPILYGLFLNNGIORDL 446
Db 421 NPILYGLFLNNGIKADL 436

RESULT 14
US-10-686-390-13
; Sequence 13, Application US/10686390
; Publication No. US20040254153A1
; GENERAL INFORMATION:
; APPLICANT: Pfizer Inc.
; APPLICANT: Maw, Graham Nigel
; APPLICANT: Wayman, Christopher Peter
; TITLE OF INVENTION: Compounds for the Treatment of Female Sexual Dysfunction
; FILE REFERENCE: PCI0343B
; CURRENT APPLICATION NUMBER: US/10/686.390
; CURRENT FILING DATE: 2003-10-15
; PRIOR APPLICATION NUMBER: US 09/708,392
; PRIOR FILING DATE: 2000-11-08
; PRIOR APPLICATION NUMBER: US 60/175,161
; PRIOR FILING DATE: 2000-03-29
; PRIOR APPLICATION NUMBER: GB 9926437.6
; PRIOR FILING DATE: 1999-11-08
; PRIOR APPLICATION NUMBER: GB 0004021.2
; PRIOR FILING DATE: 2000-02-18
; PRIOR APPLICATION NUMBER: GB 0013001.3
; PRIOR FILING DATE: 2000-05-26
; PRIOR APPLICATION NUMBER: GB 0016563.9
; PRIOR FILING DATE: 2000-07-05
; PRIOR APPLICATION NUMBER: GB 0017141.3
; PRIOR FILING DATE: 2000-07-12
; PRIOR APPLICATION NUMBER: US 60/192,962
; PRIOR FILING DATE: 2000-03-29
; PRIOR APPLICATION NUMBER: US 60/217,479
; PRIOR FILING DATE: 2000-07-11
; PRIOR APPLICATION NUMBER: US 60/221,014
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 20
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 13
; LENGTH: 445
; TYPE: PRT
; ORGANISM: Homo Sapiens
US-10-686-390-13

Query Match 86.8%; Score 2271; DB 16; Length 445;
Best Local Similarity 99.5%; Pred. No. 4.2e-185;
Matches 434; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 11 MDLEDEYNNKTATENNATATRNDDFPVDDYKSSVDDLOQYFLIGLYTFVSLLGFMGNL 70
Db 1 MDLEDEYNNKTATENNATATRNDDFPVDDYKSSVDDLOQYFLIGLYTFVSLLGFMGNL 60
QY 71 LILMALMKRNQKTTNVNFIENLAFSDILVLFCSPTLTSLVLDQWFGKVMCHIMPFL 130
Db 61 LILMALMKRNQKTTNVNFIENLAFSDILVLFCSPTLTSLVLDQWFGKVMCHIMPFL 120
QY 131 QCVSVLVSTLILISIAIVRYHMIKHPISNNLTANHGYFLIATVTLGFAICSPPLVFHSL 190
Db 121 QCVSVLVSTLILISIAIVRYHMIKHPISNNLTANHGYFLIATVTLGFAICSPPLVFHSL 180
QY 191 VELOTFGSALLSSRYLCVESWPDSYRIAFITISLLVQYILPLVCLTVSHTSVCRSISC 250
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Db 181 VELQETFGSALLSSRYLCVESWSPDSYRIAFITISLLVQVILPLVCLTVSHTSVCRSISC 240
Qy 251 GLSKENRLEENEMINLTLPKSKSGQVQLSGSHKWSYFIKRRRYSKKTACVLPAP 310
Db 241 GLSKENRLEENEMINLTLPKSKSGQVQLSGSHKWSYFIKRRRYSKKTACVLPAP 300
Qy 311 ERPSQENHSRILPENFGSVRSQSSSKFIPGVPTCFEIKPEENSDVHELVRKSVTRIK 370
Db 301 ERPSQENHSRILPENFGSVRSQSSSKFIPGVPTCFEIKPEENSDVHELVRKSVTRIK 360
Qy 371 KRSRSVFYRLTILILFAVSWMPHLHFLHVVTDFNDNLISNRHFKLVYICICHLGMMSCCL 430
Db 361 KRSRSVFYRLTILILFAVSWMPHLHFLHVVTDFNDNLISNRHFKLVYICICHLGMMSCCL 420
Qy 431 NPILYGLFNNGIQORDL 446
Db 421 NPILYGLFNNGIKADL 436

RESULT 15
US-09-826-509-533
; Sequence 533, Application US/09826509
; Publication No. US20030204073A1
; GENERAL INFORMATION:
; APPLICANT: Lehmann-Bruinsma, Karin
; APPLICANT: Liaw, Chen W.
; APPLICANT: Lin, I-Lin
; TITLE OF INVENTION: No. US20030204073A1-Endogenous, Constitutively Activated Known G
; FILE OF INVENTION: Protein-Coupled Receptors
; FILE REFERENCE: AREN-207
; CURRENT APPLICATION NUMBER: US/09/826.509
; PRIOR FILING DATE: 2001-04-05
; PRIOR APPLICATION NUMBER: 60/195,747
; PRIOR FILING DATE: 2000-04-07
; PRIOR APPLICATION NUMBER: 09/170,496
; PRIOR FILING DATE: 1998-10-13
; NUMBER OF SEQ ID NOS: 589
; SOFTWARE: PatentIn Version 2.1
; SEQ ID NO 533
; LENGTH: 445
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-826-509-533

Query Match 86.5%; Score 2262; DB 10; Length 445;
Best Local Similarity 99.3%; Pred. No. 2.4e-184;
Matches 433; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

Qy 11 MDLEDEYNNKTLATENTTAATRNDFPVWDDYKSSVDDIQLYFLIGLYTFVSLLGFMGNL 70
Db 1 MDLEDEYNNKTLATENTTAATRNDFPVWDDYKSSVDDIQLYFLIGLYTFVSLLGFMGNL 60

Qy 71 LILMALMKRNQKTTVNFLIGNLAFSDILVVLFCSPFTLTSVLLDQMMFGKVMCHIMPFL 130
Db 61 LILMALMKRNQKTTVNFLIGNLAFSDILVVLFCSPFTLTSVLLDQMMFGKVMCHIMPFL 120

Qy 131 QCYSVLVSTLILSIATVRVHMKIPISNNLTANHGYFLIATVMTLGFALCSPLVPFHS 190
Db 121 QCYSVLVSTLILSIATVRVHMKIPISNNLTANHGYFLIATVMTLGFALCSPLVPFHS 180

Qy 191 VELQETFGSALLSSRYLCVESWSPDSYRIAFITISLLVQVILPLVCLTVSHTSVCRSISC 250
Db 181 VELQETFGSALLSSRYLCVESWSPDSYRIAFITISLLVQVILPLVCLTVSHTSVCRSISC 240

Qy 251 GLSKENRLEENEMINLTLPKSKSGQVQLSGSHKWSYFIKRRRYSKKTACVLPAP 310
Db 241 GLSKENRLEENEMINLTLPKSKSGQVQLSGSHKWSYFIKRRRYSKKTACVLPAP 300

Qy 311 ERPSQENHSRILPENFGSVRSQSSSKFIPGVPTCFEIKPEENSDVHELVRKSVTRIK 370
Db 301 ERPSQENHSRILPENFGSVRSQSSSKFIPGVPTCFEIKPEENSDVHELVRKSVTRIK 360

Qy 371 KRSRSVFYRLTILILFAVSWMPHLHFLHVVTDFNDNLISNRHFKLVYICICHLGMMSCCL 430

Db 361 KRSRSVKYRLTILILFAVSWMPHLHFLHVVTDFNDNLISNRHFKLVYICICHLGMMSCCL 420
Qy 431 NPILYGLFNNGIQORDL 446
Db 421 NPILYGLFNNGIKADL 436

Search completed: June 7, 2005, 18:02:53
Job time : 151 secs

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OM protein - protein search, using sw model

Run on: June 7, 2005, 17:49:36 ; Search time 41 Seconds
(without alignments)
1171.028 Million cell updates/sec

Title: US-09-771-956-9
Perfect score: 2616
Sequence: 1 MSFYSKQDYNMDELDEYN.....KQASPVAFKINNNDNEKI 499

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 283416 seqs, 96216763 residues
Total number of hits satisfying chosen parameters: 283416

Minimum DB seq length: 0
Maximum DB seq length: 2000000000
Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : PIR_79:.*
1: pir1:.*
2: pir2:.*
3: pir3:.*
4: pir4:.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	771.5	29.5	384	2 A45490	neuropeptide Y/pep
2	740.5	28.3	382	2 B46133	neuropeptide Y/pep
3	739.5	28.3	382	2 S27388	neuropeptide Y rec
4	696.5	26.6	366	2 S71152	neuropeptide Y/pep
5	566	21.6	349	2 S12863	G protein-coupled
6	506.5	19.4	375	2 S63685	neuropeptide Y rec
7	506	19.3	375	2 I39182	neuropeptide Y/pep
8	505	19.3	375	2 G02300	pancreatic polypep
9	458	17.5	381	2 I39187	neuropeptide Y/pep
10	404	15.4	370	1 I52315	G protein-coupled
11	387	14.8	584	2 J67809	sulfakinin recepto
12	374	14.3	436	2 J65599	cholecystokinin-A
13	372	14.2	427	2 S50150	gastric CCK-A rece
14	365.5	14.0	444	2 A42685	cholecystokinin re
15	358.5	13.7	455	2 T15622	hypothetical prote
16	355	13.6	449	2 A41738	neuropeptide Y rec
17	353.5	13.5	447	2 A47430	gastrin/cholecysto
18	353	13.5	428	2 J00692	cholecystokinin ty
19	352.5	13.5	430	2 I51898	cholecystokinin A
20	345.5	13.2	453	2 J32817	gastrin receptor -
21	341	13.0	452	2 J32815	gastrin/cholecysto
22	331	12.7	450	2 J01614	gastrin receptor -
23	331	12.7	452	2 J01614	cholecystokinin B
24	322.5	12.3	398	1 J01059	neurokinin 2 recep
25	321.5	12.3	423	2 T29741	hypothetical prote
26	320	12.2	423	2 B40470	glucocorticoid-ind
27	315	12.0	.399	2 T16277	hypothetical prote
28	310	11.9	384	2 A41007	gastrin-releasing
29	304.5	11.6	394	2 J67209	galanin receptor -

ALIGNMENTS

RESULT 1

A45490
neuropeptide Y/peptide YY receptor Y1 - human
C:Species: Homo sapiens (man)
C:Date: 21-Sep-1993 #sequence_revision 18-Nov-1994 #text_change 09-Jul-2004
C:Accession: A45490; A46133; A42773
R:Herzog, H.; Baumgartner, M.; Viviero, C.; Selbie, L.A.; Auer, B.; Shine, J. J. Biol. Chem. 268, 6703-6707, 1993
A:Title: Genomic organization, localization, and allelic differences in the gene for the
A:Reference number: A45490; MUID:93203272; PMID:8095935
A:Accession: A45490
A:Molecule type: DNA
A:Residues: 1-384 <HER>
A:Cross-references: UNIPROT:P25929; GB:L07615; NID:gl89284; PIDN:AA559947.1; PID:gl89284
R:Herzog, H.; Hort, Y.J.; Ball, H.J.; Hayes, G.; Shine, J.; Selbie, L.A.
Proc. Natl. Acad. Sci. U.S.A. 89, 5794-5798, 1992
A:Title: Cloned human neuropeptide Y receptor couples to two different second messenger
A:Reference number: A46133; MUID:92335184; PMID:1321422
A:Accession: A46133
A:Status: preliminary; not compared with conceptual translation
A:Molecule type: mRNA
A:Residues: 1-384 <HE2>
A:Note: sequence extracted from NCBI backbone (NCBIP:108538)
R:Larhammar, D.; Blomqvist, A.G.; Yee, F.; Jazin, E.; Yoo, H.; Wahlested, C. J. Biol. Chem. 267, 10935-10938, 1992
A:Title: Cloning and functional expression of a human neuropeptide Y/peptide YY receptor
A:Reference number: A42773; MUID:92283782; PMID:1317848
A:Accession: A42773
A:Status: preliminary
A:Molecule type: mRNA
A:Residues: 1-384 <LAR>
A:Cross-references: GB:M8461; NID:gl89155; PIDN:AA73215.1; PID:gl89156
A:Experimental source: fetal brain
A:Note: sequence extracted from NCBI backbone (NCBIN:104735, NCBIP:104736)
C:Genetics:
A:Gene: GDB:NPVLR; NPVR
A:Cross-references: GDB:L32643; OMIM:162641
A:Map position: 4q31.3-4q32
C:Superfamily: neurokinin 1 receptor
C:Keywords: appetite; G protein-coupled receptor; glycoprotein; lipoprotein; thiolester
F:37-66/Domain: transmembrane #status predicted <TM1>
F:77-103/Domain: transmembrane #status predicted <TM2>
F:118-136/Domain: transmembrane #status predicted <TM3>
F:155-179/Domain: transmembrane #status predicted <TM4>
F:209-232/Domain: transmembrane #status predicted <TM5>
F:261-286/Domain: transmembrane #status predicted <TM6>
F:300-323/Domain: transmembrane #status predicted <TM7>
F:113-198/bisulfide bonds: #status predicted
F:186/Binding site: carboxylate (Asn) (covalent) #status predicted
F:338/Binding site: palmitate (Cys) (covalent) #status predicted

allatostatin recep
neurokinin 2 recep
glucocorticoid-ind
neurokinin 1 recep
tachykinin recepto
hypothetical prote
protein AC7.1 (imp
neurokinin 1 recep
hypothetical prote
galanin receptor 1
neurokinin 1 recep
neurokinin 3 recep
probable allatosta
neurokinin 1 recep
neurokinin 3 recep
hypothetical prote

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Query Match      29.5%; Score 771.5; DB 2; Length 384;
Best Local Similarity 34.7%; Pred. No. 4.7e-54;
Matches 170; Conservative 75; Mismatches 128; Indels 117; Gaps 8;

Qy 20 NKTLL--ATENNTA-----ATRNDDPPVDDYKSSVDDLYQFLIGLH-YTFVSLGPMGNLLI 72
Db 2 NSTLFSQVNHSHVSNFSEKNAQLAFENDCHLPLAMIFTLALAYGAVIILGVGNLAL 61

Qy 73 LMALMKRNQKTTVNFGLNLAFLSDILVFLFCSPTLTSLVLLDQWMEGKVMCHIMPLOC 132
Db 62 IILILKQKEMRNVNLIIVNLFSFLLVAIMCLPFTFTVYTLMDHWVGEAMCKLNPFVQC 121

Qy 133 VSVLVSTLLISIAIVRYHMIKHPISNNLTANHGFLIATVWTLGFAICPLPVFHSVE 192
Db 122 VSIIVSIFSLVLIIVERHQLIINPRGWRPNRHHAYGIAVWLV--AVASLPLIYQVM 179

Qy 193 LQETFGSALLSS---RYLCVESWPSDSYRIAFTISLLVQYILPLVCLTVSHTSVCRSIS 249
Db 180 TDEPFQNVTLDAYKDYKVCDFPDSHRLSYTTLVLLVQYFGPLCFIFICYFKI- 234

Qy 250 CGLSNKENRLEENEMINLTLPSSKSGPQVLSGSHKWSYFIKKHRRYSKKTACVLP 309
Db 235 -----YIRLKR----- 241

Qy 310 PERPSQENHSRILPENFGSVRSQSSSKFIPGVPTCFEIKPEENSDVHELVRKRSVTRI 369
Db 242 -----NNMDKVRDNKYRSSE 257

Qy 370 KGRSRSVFRYLITILVFAVSWMPLHLFHVVTDFNDNLISNRHFKLVYICICHLGMSCC 429
Db 258 TKR---INIMLSIVAVFACWCLPTITFNTVFDWNHQLIATCNHNLFLCLHLTAMISTC 314

Qy 430 LNPILYGLNNGIQDLOFFNFCDFRSRDDYETIAMSTMHTDVKTSIKQASPVAFKK 489
Db 315 VNPIFYGLNKNFQDLOFFNFCDFRSRDDYETIAMSTMHTDVKTSIKQASPVAFKK 374

Qy 490 INNDDNEKI 499
Db 375 INNDDNEKI 384

RESULT 2
neuropeptide Y/peptide YY receptor Y1 - mouse
C;Species: Mus musculus (house mouse)
C;Date: 21-Sep-1993 #sequence_revision 18-Nov-1994 #text_change 20-Apr-2000
C;Accession: B46133
R;Herzog, H.; Hort, Y.J.; Ball, H.J.; Hayes, G.; Shine, J.; Selbie, L.A.
Proc. Natl. Acad. Sci. U.S.A. 89, 5794-5798, 1992
A;Title: Cloned human neuropeptide Y receptor couples to two different second messenger
A;Reference number: A46133; MUID:92335184; PMID:1321422
A;Accession: B46133
A;Status: preliminary; not compared with conceptual translation
A;Molecule type: nucleic acid
A;Residues: 1-382 <HER>
A;Note: sequence extracted from NCBI backbone (NCBIP:108539)
C;Superfamily: neurokinin 1 receptor
C;Keywords: appetite; G protein-coupled receptor; transmembrane protein

Query Match      28.3%; Score 740.5; DB 2; Length 382;
Best Local Similarity 33.6%; Pred. No. 1.4e-51;
Matches 166; Conservative 74; Mismatches 127; Indels 127; Gaps 10;

Qy 20 NKTLL--ATENNTA-----ATRNDDPPVDDYKSSVDDLYQFLIGLYTF-----VSLLGFMG 68
Db 2 NSTLFSRVENSVHYNVNSPFLAFEN-----DDCHLPLAVIFTLALAYGAVIILGVSG 56

Qy 69 NLILMALMKRNQKTTVNFGLNLAFLSDILVFLFCSPTLTSLVLLDQWMEGKVMCHIMP 128
Db 57 NLALIIILKQKEMRNVNLIIVNLFSFLLVAIMCLPFTFTVYTLMDHWVGEAMCKLN 116

Qy 129 FLQCVSVLVSTLLISIAIVRYHMIKHPISNNLTANHGFLIATVWTLGFAICPLPVFH 188
Db 117 FVQCVSITVSIIFSLVLIIVERHQLIINPRGWRPNRHHAYGIAVWLVAVASSLPFVIYQ 176

Qy 189 SILVELQETFGSALLSS---RYLCVESWPSDSYRIAFTISLLVQYILPLVCLTVSHTSV 245
Db 177 ILTD--EPQNVSLAFAFKDYKVCDFPDSHRLSYTTLVLLVQYFGPLCFIFICYFKI- 233

Qy 246 RSISCGLSNKENRLEENEMINLTLPSSKSGPQVLSGSHKWSYFIKKHRRYSKKTAC 305
Db 234 -----YIRLKRNNMMDK----- 246

Qy 306 VLPAPERPSQENHSRILPENFGSVRSQSSSKFIPGVPTCFEIKPEENSDVHELVRKRS 365
Db 247 -----IRDSKYRSSE----- 256

Qy 366 VTRIKKRSRSVFRYLITILVFAVSWMPLHLFHVVTDFNDNLISNRHFKLVYICICHLG 425
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Db 117 FVQCVSITVSIIFSLVLIIVERHQLIINPRGWRPNRHHAYGIAVWLVAVASSLPFVIYQ 176
Qy 189 SILVELQETFGSALLSS---RYLCVESWPSDSYRIAFTISLLVQYILPLVCLTVSHTSV 245
Db 177 ILTD--EPQNVSLAFAFKDYKVCDFPDSHRLSYTTLVLLVQYFGPLCFIFICYFKI- 233
Qy 246 RSISCGLSNKENRLEENEMINLTLPSSKSGPQVLSGSHKWSYFIKKHRRYSKKTAC 305
Db 234 -----YIRLKRNNMMDK----- 246
Qy 306 VLPAPERPSQENHSRILPENFGSVRSQSSSKFIPGVPTCFEIKPEENSDVHELVRKRS 365
Db 247 -----IRDSKYRSSE----- 256
Qy 366 VTRIKKRSRSVFRYLITILVFAVSWMPLHLFHVVTDFNDNLISNRHFKLVYICICHLG 425

RESULT 3
S27388
neuropeptide Y receptor NPY-1 - mouse
C;Species: Mus musculus (house mouse)
C;Date: 19-Mar-1997 #sequence_revision 19-Mar-1997 #text_change 09-Jul-2004
C;Accession: S27388
R;Eva, C.; Oberio, A.; Sprengel, R.; Genazzani, E.
FEBS Lett. 314, 285-288, 1992
A;Title: The murine NPY-1 receptor gene. Structure and delineation of tissue-specific ex
A;Reference number: S27388; MUID:93106169; PMID:1468559
A;Accession: S27388
A;Status: preliminary
A;Molecule type: DNA
A;Residues: 1-382 <EVA>
A;Cross-references: UNIPROT:Q04573; EMBL:Z18280; NID:G53438; PIDN:CAA79157.1; PID:G53439
C;Superfamily: neurokinin 1 receptor

Query Match      28.3%; Score 739.5; DB 2; Length 382;
Best Local Similarity 33.4%; Pred. No. 1.7e-51;
Matches 165; Conservative 76; Mismatches 126; Indels 127; Gaps 10;

Qy 20 NKTLL--ATENNTA-----ATRNDDPPVDDYKSSVDDLYQFLIGLYTF-----VSLLGFMG 68
Db 2 NSTLFSRVENSHYHNSPFLAFEN-----DDCHLPLAVIFTLALAYGAVIILGVSG 56

Qy 69 NLILMALMKRNQKTTVNFGLNLAFLSDILVFLFCSPTLTSLVLLDQWMEGKVMCHIMP 128
Db 57 NLALIIILKQKEMRNVNLIIVNLFSFLLVAIMCLPFTFTVYTLMDHWVGEAMCKLN 116

Qy 129 FLQCVSVLVSTLLISIAIVRYHMIKHPISNNLTANHGFLIATVWTLGFAICPLPVFH 188
Db 117 FVQCVSITVSIIFSLVLIIVERHQLIINPRGWRPNRHHAYGIAVWLVAVASSLPFVIYQ 176

Qy 189 SILVELQETFGSALLSS---RYLCVESWPSDSYRIAFTISLLVQYILPLVCLTVSHTSV 245
Db 177 ILTD--EPQNVSLAFAFKDYKVCDFPDSHRLSYTTLVLLVQYFGPLCFIFICYFKI- 233

Qy 246 RSISCGLSNKENRLEENEMINLTLPSSKSGPQVLSGSHKWSYFIKKHRRYSKKTAC 305
Db 234 -----YIRLKRNNMMDK----- 246

Qy 306 VLPAPERPSQENHSRILPENFGSVRSQSSSKFIPGVPTCFEIKPEENSDVHELVRKRS 365
Db 247 -----IRDSKYRSSE----- 256

Qy 366 VTRIKKRSRSVFRYLITILVFAVSWMPLHLFHVVTDFNDNLISNRHFKLVYICICHLG 425
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RESULT 6

S63685
neuropeptide Y receptor D type - mouse
C;Species: Mus musculus (house mouse)
C;Date: 20-Jul-1996 #sequence_revision 13-Mar-1997 #text_change 09-Jul-2004
C;Accession: S63685
R;Gregor, P.; Millham, M.L.; Feng, Y.; DeCarr, L.B.; McCaleb, M.L.; Cornfield, L.J.
FEBS Lett. 381, 58-62, 1996
A;Title: Cloning and characterization of a novel receptor to pancreatic polypeptide, a member of the Y family of G-protein coupled receptors
A;Reference number: S63685; MUID:96193913; PMID:8641440
A;Accession: S63685
A;Status: preliminary
A;Molecule type: DNA
A;Residues: 1-375 <RES>
A;Cross-references: UNIPROT:Q61041; EMBL:U40189; NID:g1223969; PIDN:AAC52442.1; PID:g1223969
C;Superfamily: neurokinin 1 receptor

Query Match 19.4%; Score 506.5; DB 2; Length 375;
Best Local Similarity 25.6%; Pred. No. 7.2e-33;
Matches 115; Conservative 73; Mismatches 137; Indels 125; Gaps 6;
QY 49 DLQYFLIGLYTFVSLGLGFMGNLLILMALMKRNQKTTVNFILGNLAFSDILVLFCSPT 108
DB 39 ELLAFIITTSYISITILGVGLNCLIFVTRQKESNVNLLIANLAFSDFLMCLCOPLT 98
QY 109 LTVLLDQWFGKVMCHIMPFLQCVSLVSTLILISIAIVRYHMIKHPISNNLTANHGYF 168
DB 99 VTYTINDYWFGEVLCKMLTFIQCMSTVLSILSVLVALERHQLIINPTGWKPSISQAYL 158
QY 169 LIATVMTLGFALCSPLPVFHSLVE---PVFH---SLVELQETFGSALLSSRYLCVESWPDSY 217
DB 159 GIVVINFISCFSLPLFLANSTLNDLFYHNSKVE-----FLEKVVCFVSWSDHH 210
QY 218 RIATFISLLVQYILPLVCLTVSHTSVCRSISCSLSNKENLENEMINLTLPSPKSGP 277
DB 211 RLIVTTELLFOYCIPLAFILVCYRIYQRL-----KRINSM---LMTWTATFAVLMLPLHVF 284
QY 278 QVKGSGHKSWSYFIKHHRRYSKKTACVLPAPERPSQENHSRLPENFGSVRSQSSSS 337
DB 242 -----QROKHVFHAHACSSRAGOM----- 260
QY 338 KPIPGVPTCFEIKPEENSDVHELVRKRSVTRIKRGRSVFYRLTILVFAVSWMPHLHF 397
DB 261 -----KRINSM---LMTWTATFAVLMLPLHVF 284
QY 398 HVTDFNDNLISNRHFKLVYICHLGMMSCCLNPILYGLFNGIQRDLQFFNFCDFRS 457
DB 285 NTLDEWYQEAIPACHGNLIFLMCHLLAMASTCVNPFYIYGLFNLNFKKDIKALVLTCHRS 344
QY 458 RDDDYETIAMSTWHTDYSKTSKQASPVAF 487
DB 345 PQGESEHLPLSTVHTDLSKSGMRMGSKSNF 374

RESULT 7

I39182
neuropeptide Y/peptide YY receptor Y4 - human
C;Species: Homo sapiens (man)
C;Date: 01-Mar-1996 #sequence_revision 01-Mar-1996 #text_change 09-Jul-2004
C;Accession: I39182
R;Bard, J.A.; Walker, M.W.; Branchek, T.A.; Weinshank, R.L.
J. Biol. Chem. 270, 26762-26765, 1995
A;Title: Cloning and functional expression of a human Y4 subtype receptor for pancreatic polypeptide
A;Reference number: I39182; MUID:96070761; PMID:7592911
A;Accession: I39182
A;Status: preliminary
A;Molecule type: DNA
A;Residues: 1-375 <RES>
A;Cross-references: UNIPROT:P50391; EMBL:U35232; NID:g1063629; PIDN:AAC50280.1; PID:g1063629
C;Superfamily: neurokinin 1 receptor
C;Keywords: appetite

Query Match 19.3%; Score 506; DB 2; Length 375;
Best Local Similarity 25.2%; Pred. No. 7.9e-33;
Matches 112; Conservative 85; Mismatches 133; Indels 114; Gaps 7;

QY 49 DLQYFLIGLYTFVSLGLGFMGNLLILMALMKRNQKTTVNFILGNLAFSDILVLFCSPT 108
DB 39 DVMVFIVTSYISITVVGVLGNCLMCVTVRQKEKANVTNLLIANLAFSDFLMCLCOPLT 98
QY 109 LTVLLDQWFGKVMCHIMPFLQCVSLVSTLILISIAIVRYHMIKHPISNNLTANHGYF 168
DB 99 AVTYTINDYWFGEVLCKMLTFIQCMSTVLSILSVLVALERHQLIINPTGWKPSISQAYL 158
QY 169 LIATVMTLGFALCSPLPVFHSLVE---LQETFGSAL--LSSRYLCVESWPDSYSYRIAPTIS 224
DB 159 GIVLIWVIACVLSLPF-LANSILENV/HKNHSALEFLADKVVCTESWPLAHHRTIYTF 217
QY 225 LLLVQYILPLVCLTVSHTSVCRSISCSLSNKENLENEMINLTLPSPKSGPQVKLSGS 284
DB 218 LLLFOYCLPLGFLVLCYARIYR-----RLQROGRV-----F 248
QY 285 HKWSYFIKHHRRYSKKTACVLPAPERPSQENHSRLPENFGSVRSQSSSKFIPGVP 344
DB 249 HKGTYSLRAGMKQ----- 262
QY 345 TCPEIKPEENSDVHELVRKRSVTRIKRGRSVFYRLTILVFAVSWMPHLHFVHTDFN 404
DB 263 -----VNVLVVWVAFVAVLMLPLHVPNSLEDWH 291
QY 405 DNLISNRHFKLVYICHLGMMSCCLNPILYGLFNGIQRDLQFFNFCDFRSDDYET 464
DB 292 HEAIPICHGNLIFLVCHLLAMASTCVIPIFYGLFNLNFKKEIKALVLTQOASPLESEH 351
QY 465 IAMSTWHTDYSKTSKX---QASPV 415
DB 352 LPLSTVHTVTSKSGSLRSORNP 315

RESULT 8

G02300
pancreatic polypeptide receptor - human
C;Species: Homo sapiens (man)
C;Date: 21-Dec-1996 #sequence_revision 06-Jun-1997 #text_change 09-Jul-2004
C;Accession: G02300
R;Yan, H.; Yang, J.; Marasco, J.; Yamaguchi, K.; Brenner, S.; Collins, F.; Karbon, W.
submitted to the EMBL Data Library, December 1995
A;Reference number: H01018
A;Accession: G02300
A;Status: preliminary; translated from GI/EMBL/DDBJ
A;Molecule type: mRNA
A;Residues: 1-375 <YAN>
A;Cross-references: UNIPROT:P50391; EMBL:U42387; NID:g1314327; PIDN:AAB07759.1; PID:g1314327
C;Superfamily: neurokinin 1 receptor

Query Match 19.3%; Score 505; DB 2; Length 375;
Best Local Similarity 25.2%; Pred. No. 9.5e-33;
Matches 112; Conservative 85; Mismatches 133; Indels 114; Gaps 7;

QY 49 DLQYFLIGLYTFVSLGLGFMGNLLILMALMKRNQKTTVNFILGNLAFSDILVLFCSPT 108
DB 39 DVMVFIVTSYISITVVGVLGNCLMCVTVRQKEKANVTNLLIANLAFSDFLMCLCOPLT 98
QY 109 LTVLLDQWFGKVMCHIMPFLQCVSLVSTLILISIAIVRYHMIKHPISNNLTANHGYF 168
DB 99 SVTYTINDYWFGEVLCKMSAFIQCMSTVLSILSVLVALERHQLIINPTGWKPSISQAYL 158
QY 169 LIATVMTLGFALCSPLPVFHSLVE---LQETFGSAL--LSSRYLCVESWPDSYSYRIAPTIS 224
DB 159 GIVLIWVIACVLSLPF-LANSILENV/HKNHSALEFLADKVVCTESWPLAHHRTIYTF 217
QY 225 LLLVQYILPLVCLTVSHTSVCRSISCSLSNKENLENEMINLTLPSPKSGPQVKLSGS 284
DB 218 LLLFOYCLPLGFLVLCYARIYR-----RLQROGRV-----F 248

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OM protein - protein search, using sw model

Run on: June 7, 2005, 17:48:51 ; Search time 178 Seconds
(without alignments)
1435.548 Million cell updates/sec

Title: US-09-771-956-9
Perfect score: 2616
Sequence: 1 MSFYSKQDYNMDLEDEYN.....KQASPVAFKINNDDNEKI 499

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 1612378 seqs, 512079187 residues

Total number of hits satisfying chosen parameters: 1612378

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : UniProt_03.*
1: uniprot_sprot.*
2: uniprot_trembl.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	2326	88.9	455	1	Q15761 homo sapien
2	2262	86.5	445	2	Q9GK73 macaca mula
3	2188	83.6	446	2	Q925f1 cavia porce
4	2177	83.2	446	1	O62729 canis famil
5	2036.5	77.8	456	1	Q63634 rattus norv
6	2022	77.3	466	1	O70342 mus musculu
7	1976	75.5	446	1	O97969 sus scrofa
8	1603.5	61.3	443	2	Q8QFM2 gallus gall
9	771.5	29.5	384	1	P25929 homo sapien
10	761	29.1	382	1	O02813 canis famil
11	752	28.7	383	2	Q9GK75 macaca mula
12	740.5	28.3	382	1	P21555 rattus norv
13	740	28.3	383	1	O02835 sus scrofa
14	739.5	28.3	382	1	Q04573 mus musculu
15	724.5	27.7	383	1	O9wvd0 cavia porce
16	707.5	27.0	385	2	Q8QFM1 gallus gall
17	696.5	26.6	366	1	P34992 xenopus lae
18	617.5	23.6	377	2	O73733 brachydanio
19	582.5	22.3	373	2	Q6Y6A5 squalus aca
20	558	21.3	348	2	Q6Y6A4 squalus aca
21	546	20.9	371	1	O61212 mus musculu
22	545.5	20.9	371	1	P79217 oryctolagus
23	536.5	20.9	377	2	Q8QGM3 gallus gall
24	512.5	19.6	371	2	Q8QFM1 gallus gall
25	512	19.6	365	2	Q8UUV7 lampetra fl
26	511	19.5	375	1	Q63447 rattus norv
27	506.5	19.4	375	1	O61041 mus musculu
28	506	19.3	375	1	P50391 homo sapien
29	506	19.3	375	2	Q6FH06 homo sapien
30	504.5	19.3	375	2	Q6YHV0 macaca mula
31	503.5	19.2	374	2	Q9YHX1 gadus morhua

32	503	19.2	375	2	O57463 brachydanio
33	502.5	19.2	375	2	Q8BZF9 mus musculu
34	496.5	19.0	375	2	O97505 sus scrofa
35	489	18.7	372	2	O922D4 cavia porce
36	478	18.3	373	2	O73734 brachydanio
37	470.5	18.0	385	1	NY2R_CHICK
38	467.5	17.9	381	2	Q8BWW1 mus musculu
39	467.5	17.9	385	1	NY2R_MOUSE
40	464.5	17.8	381	2	O9ERC0 mus musculu
41	459	17.5	382	1	NY2R_PIG
42	458	17.5	381	1	NY2R_HUMAN
43	458	17.5	381	1	NY2R_MACMU
44	458	17.5	381	2	Q6AZZ6 macaca mula
45	455	17.4	372	2	Q6PR57 brachydanio

ALIGNMENTS

RESULT 1
NY5R_HUMAN
ID NY5R_HUMAN STANDARD; PRT; 455 AA.
AC Q15761; Q92916;
DT 01-NOV-1997 (Rel. 35, Last sequence update)
DT 01-NOV-1997 (Rel. 35, Last sequence update)
DT 25-OCT-2004 (Rel. 45, Last annotation update)
DE Neuropeptide Y receptor type 5 (NPY5-R) (NPY-Y5 receptor) (Y5 receptor) (NPY5).
DE Name=NPY5R; Synonyms=NPYR5;
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX NCBI_TaxID=9606;
RN [1]
RP SEQUENCE FROM N.A.
RC TISSUE=Hippocampus;
RX MEDLINE=96317589; PubMed=8700207; DOI=10.1038/382168a0;
RA Gerald C., Walker M.W., Criscione L., Gustafson E.L., Batzl-Hartmann C., Smith K.E., Vaysee P., Durkin M.M., Laz T.M., Linemeyer D.L., Schaffhauser A.O., Whitebread S., Hofbauer K.G., Taber R.I., Branchek T.A., Weinshank R.B.;
RT "A receptor subtype involved in neuropeptide-Y-induced food intake.";
RL Nature 382:168-171(1996).
RN [2]
RP SEQUENCE OF 11-455 FROM N.A.
RX MEDLINE=96421636; PubMed=8824284; DOI=10.1074/jbc.271.42.26044;
RA Hu Y., Bloomquist B.T., Cornfield L.J., Decarr L.B., Flores-Riveros J.R., Friedman L., Jiang P., Lewis-Higgins L., Sadlowski Y., Schaefer J., Velazquez N., McCaleb M.L.;
RT "Identification of a novel hypothalamic neuropeptide Y receptor associated with feeding behavior.";
RL J. Biol. Chem. 271:26315-26319(1996).
RN [3]
RP SEQUENCE OF 11-455 FROM N.A.
RX MEDLINE=97312686; PubMed=9169127; DOI=10.1006/geno.1997.4684;
RA Herzog H., Darby K., Ball H., Hott Y., Beck-Sickingher A., Shine J.;
RT "Overlapping gene structure of the human neuropeptide Y receptor subtypes Y1 and Y5 suggests coordinate transcriptional regulation.";
RL Genomics 41:315-319(1997).
RN [4]
RP SEQUENCE OF 11-455 FROM N.A.
RX Kopatz S.A., Aronstam R.S., Sharma S.V.;
RT "cDNA clones of human proteins involved in signal transduction sequenced by the Guthrie cDNA resource center (www.cdna.org).";
RL Submitted (JUN-2003) to the EMBL/Genbank/DBJ databases.
CC -!- FUNCTION: Receptor for neuropeptide Y and peptide YY. The activity of this receptor is mediated by G proteins that inhibit adenylylate cyclase activity. Seems to be associated with food intake. Could be involved in feeding disorders.
CC -!- SUBCELLULAR LOCATION: Integral membrane protein.
CC -!- TISSUE SPECIFICITY: Brain; hypothalamus.
CC -!- SIMILARITY: Belongs to the G-protein coupled receptor 1 family.

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DR -----
 DR EMBL; U56079; AAC50623.1; -;
 DR EMBL; U66275; AAC50741.1; -;
 DR EMBL; U94320; AAC51295.1; -;
 DR EMBL; AY322538; AAP84351.1; -;
 DR Genew; HGNC:7958; NPY5R.
 DR MIM; 602001; -;
 DR GO; GO:0005887; C: integral to plasma membrane; TAS.
 DR GO; GO:0004983; F: neuropeptide Y receptor activity; TAS.
 DR GO; GO:0007186; P: G-protein coupled receptor protein signalin. .; TAS.
 DR InterPro; IPR000276; GPCR_Rhodopsn.
 DR InterPro; IPR000393; NPV5_receptor.
 DR InterPro; IPR000611; NPV_receptor.
 DR Pfam; PF00001; 7tm_1; 1.
 DR PRINTS; PR00237; GPCR_RHODOPSIN.
 DR PROSITE; PS02622; G-PROTEIN_RECEP_F1_2; 1.
 DR PROSITE; PS02622; G-PROTEIN_RECEP_F1_2; 1.
 KW G-protein coupled receptor; Glycoprotein; Lipoprotein; Palmitate;
 KW phosphorylation; Transmembrane.
 FT DOMAIN 1 50 Extracellular (Potential).
 FT TRANSMEM 51 72 1 (Potential).
 FT DOMAIN 73 84 Cytoplasmic (Potential).
 FT TRANSMEM 85 105 2 (Potential).
 FT DOMAIN 106 125 Extracellular (Potential).
 FT TRANSMEM 126 147 3 (Potential).
 FT DOMAIN 148 167 Cytoplasmic (Potential).
 FT TRANSMEM 168 188 4 (Potential).
 FT DOMAIN 189 220 Extracellular (Potential).
 FT TRANSMEM 221 242 5 (Potential).
 FT DOMAIN 243 378 Cytoplasmic (Potential).
 FT TRANSMEM 379 401 6 (Potential).
 FT DOMAIN 402 414 Extracellular (Potential).
 FT TRANSMEM 415 438 7 (Potential).
 FT DOMAIN 439 455 Cytoplasmic (Potential).
 FT CARBOHYD 20 20 N-linked (GlcNAc. .) (Potential).
 FT CARBOHYD 27 27 N-linked (GlcNAc. .) (Potential).
 FT DISULFID 124 208 By similarity.
 FT LIPID 452 452 S-palmitoyl cysteine (Potential).
 SQ SEQUENCE 455 AA; 51990 MW; 95f2747BE5FB8FF7 CRC64;

Query Match 88.9%; Score 2326; DB 1; Length 455;
 Best Local Similarity 99.6%; Pred. No. 2.1e-147;
 Matches 444; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

Qy 1 MSFYSKQDYNMDLDELDEYKNTLATENTNATRNDFPVDYKSSVDDIQLYFLIGLYTF 60
 Db 1 MSFYSKQDYNMDLDELDEYKNTLATENTNATRNDFPVDYKSSVDDIQLYFLIGLYTF 60
 Qy 61 VSLGFGNGLLILMALMKRQKNTVNFLGNLAFSDILVFLCSPFTLTSVLLDQMF 120
 Db 61 VSLGFGNGLLILMALMKRQKNTVNFLGNLAFSDILVFLCSPFTLTSVLLDQMF 120
 Qy 121 KVMCHIMPFQCVSVLSTLILISIAIVRYHMKHPISNNLTANHGFLIATVMTLGF 180
 Db 121 KVMCHIMPFQCVSVLSTLILISIAIVRYHMKHPISNNLTANHGFLIATVMTLGF 180
 Qy 181 CSPLPVHSLVELQETFGSALLSSRYLCVESWPSDSYRIAFITSLLLVQVILPLVCLTVS 240
 Db 181 CSPLPVHSLVELQETFGSALLSSRYLCVESWPSDSYRIAFITSLLLVQVILPLVCLTVS 240
 Qy 241 HTSVCRISICGLSNKENRLEENEMINTLHPSKSGFQVKLSGSHKWSYFIKHHRRYS 300
 Db 241 HTSVCRISICGLSNKENRLEENEMINTLHPSKSGFQVKLSGSHKWSYFIKHHRRYS 300
 Qy 301 KKTACVLPAPERPSQENHSRILPENFGSVRSQSSSKFIPGVPTCFEIKPEENSVDHEL 360
 Db 301 KKTACVLPAPERPSQENHSRILPENFGSVRSQSSSKFIPGVPTCFEIKPEENSVDHEL 360

Db 301 KKTACVLPAPERPSQENHSRILPENFGSVRSQSSSKFIPGVPTCFEIKPEENSVDHEL 360
 Qy 361 RVKRSVTRIKKRSFYRILITILVAVSWMPHLHFVHVVTDNDNLINRHFKLVCIC 420
 Db 361 RVKRSVTRIKKRSFYRILITILVAVSWMPHLHFVHVVTDNDNLINRHFKLVCIC 420
 Qy 421 HLLGMWSCCLNPILYGLFNNGIQIDL 446
 Db 421 HLLGMWSCCLNPILYGLFNNGIKADL 446

RESULT 2

Q9GK73
 ID Q9GK73 PRELIMINARY; PRT; 445 AA.
 AC Q9GK73;
 DT 01-MAR-2001 (Tremblurel. 16, Created)
 DT 01-MAR-2001 (Tremblurel. 16, Last sequence update)
 DT 01-JUN-2003 (Tremblurel. 24, Last annotation update)
 DE Neuropeptide Y receptor Y5.
 OS Macaca mulatta (Rhesus macaque).
 OC Sukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Primates; Catarrhini; Cercopitheciidae;
 OC Cercopitheciinae; Macaca.
 OX NCBI_TaxID=9544;
 RN [1]
 RP SEQUENCE FROM N.A.
 RX MEDLINE=21184974; PubMed=11287088; DOI=10.1016/S0196-9781(01)00336-9;
 RA Gehlert D.R., Yang P., George C., Wang Y., Schober D.,
 RA Gackheimer S., Johnson D., Beaver L.S., Gaski R.A., Baez M.;
 RT "Cloning and characterization of Rhesus monkey neuropeptide Y receptor
 RT subtypes (1).";
 RL Peptides 22:343-350 (2001).
 DR EMBL; AF303091; AAG40773.1; -;
 DR GO; GO:0016021; C: integral to membrane; IEA.
 DR GO; GO:0004983; F: neuropeptide Y receptor activity; IEA.
 DR GO; GO:0004872; F: receptor activity; IEA.
 DR GO; GO:0001584; F: rhodopsin-like receptor activity; IEA.
 DR GO; GO:0007218; P: neuropeptide signaling pathway; IEA.
 DR InterPro; IPR000276; GPCR_Rhodopsn.
 DR InterPro; IPR000393; NPV5_receptor.
 DR InterPro; IPR000611; NPV_receptor.
 DR Pfam; PF00001; 7tm_1; 1.
 DR PRINTS; PR00237; GPCR_RHODOPSIN.
 DR PRINTS; PR01016; NRPEPTIDEYR.
 DR PRINTS; PR01012; NRPEPTIDEYR.
 DR PROSITE; PS02622; G-PROTEIN_RECEP_F1_2; 1.
 KW Neuropeptide; Receptor.
 SQ SEQUENCE 445 AA; 50812 MW; AEDA(CD259675BC93 CRC64;

Query Match 86.5%; Score 1262; DB 2; Length 445;
 Best Local Similarity 99.1%; Pred. No. 3.9e-143;
 Matches 432; Conservative 2; Mismatches 2; Indels 0; Gaps 0;

Qy 11 MDLDEYKNTLATENTNATRNDFPVDYKSSVDDIQLYFLIGLYTFVSLGPMGNL 70
 Db 1 MDLDEYKNTLATENTNATRNDFPVDYKSSVDDIQLYFLIGLYTFVSLGPMGNL 60
 Qy 71 LIIMALKRQKNTVNFLGNLAFSDILVFLCSPFTLTSVLLDQMFQKVMCHIMPF 130
 Db 61 LIIMALKRQKNTVNFLGNLAFSDILVFLCSPFTLTSVLLDQMFQKVMCHIMPF 120
 Qy 131 QCVSVLSTLILISIAIVRYHMKHPISNNLTANHGFLIATVMTLGFALCSPLPVHSL 190
 Db 121 QCVSVLSTLILISIAIVRYHMKHPISNNLTANHGFLIATVMTLGFALCSPLPVHSL 180
 Qy 191 VELQETFGSALLSSRYLCVESWPSDSYRIAFITSLLLVQVILPLVCLTVSHTSVCRSISC 250
 Db 181 VELQETFGSALLSSRYLCVESWPSDSYRIAFITSLLLVQVILPLVCLTVSHTSVCRSISC 240
 Qy 251 GLSNKENRLEENEMINTLHPSKSGFQVKLSGSHKWSYFIKHHRRYSKKTACVLPAP 310
 Db 241 GLSNKENRLEENEMINTLHPSKSGFQVKLSGSHKWSYFIKHHRRYSKKTACVLPAP 300


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QY 311 ERPSQENSRILPENFGSVRSQSSSKFIPGVPTCFEIKPEENSDVHVELRVKRSVTRIK 370
Db 301 ERPSQENSRILPENFGSVRSQSSSKFIPGVPTCFEIKPEENSDVHVELRVKRSVTRIK 360
QY 371 KRSRSVFYRLTILILVFAVSWMPLHLPHVVTDFNDNLISNRHFKLVYICICHLGMMSCCL 430
Db 361 KRSRSVFYRLTILILVFAVSWMPLHLPHVVTDFNDNLISNRHFKLVYICICHLGMMSCCL 420
QY 431 NPILYGLNNGIQDRL 446
Db 421 NPILYGLNNGIKADL 436

RESULT 3
Q925F1 PRELIMINARY; PRT; 446 AA.
AC Q925F1
DT 01-DEC-2001 (TREMELrel. 19, Created)
DT 01-DEC-2001 (TREMELrel. 19, Last sequence update)
DE NPV receptor 5.
OS Cavia porcellus (Guinea pig).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Hystriognathi; Caviidae; Cavia.
OX NCBI_TaxID=10141;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=21184976; PubMed=11287090; DOI=10.1016/S0196-9781(01)00338-2;
RA Lundell I., Eriksson H., Marklund U., Larhammar D.;
RT "Cloning and characterization of the guinea pig neuropeptide Y
receptor Y5.";
RL Peptides 22:357-363(2001).
DR EMBL; AF363240; AAKS2800.1; -.
DR GO; GO:0016021; C:integral to membrane; IEA.
DR GO; GO:0004983; E:neuropeptide Y receptor activity; IEA.
DR GO; GO:0004872; F:receptor activity; IEA.
DR GO; GO:0001584; F:rhodopsin-like receptor activity; IEA.
DR GO; GO:0007186; P:G-protein coupled receptor protein signalin. . .; IEA.
DR Pfam; PF00001; 7tm_1; 1.
DR PRINTS; PR00237; GPCRHHODOPSN.
DR PRINTS; PR01016; NRPEPTIDEYR.
DR PROSITE; PS0262; G_PROTEIN_RECEP_F1_2; 1.
KW Receptor.
SQ SEQUENCE 446 AA; 50936 MW; 2C3984B0A90AA693 CRC64;
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Query Match 83.6%; Score 2188; DB 2; Length 446;
Best Local Similarity 95.4%; Pred. No. 3.4e-138;
Matches 416; Conservative 9; Mismatches 11; Indels 0; Gaps 0;

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QY 11 MDLEDEYNNKTLATENNNTAATRNDDFPVDDYKSSVDLQVFLGLYTFVSLILGFMGNL 70
Db 1 MDLEKLEYNNKTLATENNNTTTRNSDDFPVDDYRSVDDLQVFLGLYTFVSLILGFMGNL 60
QY 71 LILMALMKRQKTKTNFNLIGNLAFSDILVLFCSPFLLTSVLLDQWFMGKVMCHIMPFL 130
Db 61 LILMALIKRQKTKTNFNLIGNLAFSDILVLFCSPFLLTSVLLDQWFMGKVMCHIMPFL 120
QY 131 QCVSLVSTLILISIAIVRYHMKIPISNNLTANHGYFLIATVTLGFAICSPLPVFHSL 190
Db 121 QCVSLVSTLILISIAIVRYHMKIPISNNLTANHGYFLIATVTLGFAICSPLPVFHSL 180
QY 191 VELOTFGALLSSRYLCVSWPSDYRIAFITISLLVQYILPLVCLTVSHTSVCRSISC 250
Db 191 VELOTFGALLSSRYLCVSWPSDYRIAFITISLLVQYILPLVCLTVSHTSVCRSISC 240
QY 251 GLSKNENLEENINLTHPSKSGQVQLSGHWSYFIKHKRRYSKKTACVLPAP 310
Db 241 GLSKNENLEENINLTHPSKSGQVQLSKTHWSYFIKHKRRYSKKTACVLPAP 300
QY 311 ERPSQENSRILPENFGSVRSQSSSKFIPGVPTCFEIKPEENSDVHVELRVKRSVTRIK 370
Db 301 ARPSLENSRILPENFGSVRSQSSSKFIPGVPTCFEIKPEENSDVHVELRVKRSVTRIK 360
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QY 371 KRSRSVFYRLTILILVFAVSWMPLHLPHVVTDFNDNLISNRHFKLVYICICHLGMMSCCL 430
Db 361 KRSRSVFYRLTILILVFAVSWMPLHLPHVVTDFNDNLISNRHFKLVYICICHLGMMSCCL 420
QY 431 NPILYGLNNGIQDRL 446
Db 421 NPILYGLNNGIKADL 436

RESULT 4
NY5R_CANFA STANDARD; PRT; 446 AA.
ID NY5R_CANFA
AC O62729;
DT 15-DEC-1998 (Rel. 37, Created)
DT 15-DEC-1998 (Rel. 37, Last sequence update)
DT 25-OCT-2004 (Rel. 45, Last annotation update)
DE Neuropeptide Y receptor type 5 (NPY5-R) (NPY-Y5 receptor) (Y5
receptor) (NPY5).
GN Name=NPY5R; Synonyms=NPY5;
OS Canis familiaris (Dog).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Carnivora; Fissipedia; Canidae; Canis.
OX NCBI_TaxID=9615;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=95017379; PubMed=9802393; DOI=10.1016/S0167-0115(98)00052-4;
RA Borowsky B., Walker M.W., Bard J., Weinshank R.L., Laz T.M.,
RA Vayssie P., Branchek T.A., Gerald C.;
RT "Molecular biology and pharmacology of multiple NPY Y5 receptor
species homologs.";
RL Regul. Pept. 75:45-53(1998).
CC -!- FUNCTION: Receptor for neuropeptide Y and peptide YY. The activity
of this receptor is mediated by G proteins that inhibit adenylylate
cyclase activity. Seems to be associated with food intake. Could
be involved in feeding disorders (By similarity).
-!- SUBCELLULAR LOCATION: Integral membrane protein.
-!- SIMILARITY: Belongs to the G-protein coupled receptor 1 family.
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entities requires a license agreement (See http://www.iesb-sib.ch/announce/
or send an email to license@sib-sib.ch).
CC EMBL; AF049328; AAC17838.1; -.
DR InterPro; IPR000276; GPCR_Rhodpsn.
DR InterPro; IPR000393; NPY5_receptor.
DR InterPro; IPR000611; NPY_receptor.
DR Pfam; PF00001; 7tm_1; 1.
DR PRINTS; PR00237; GPCRHHODOPSN.
DR PROSITE; PS00237; G_PROTEIN_RECEP_F1_1; FALSE_NEG.
DR PROSITE; PS0262; G_PROTEIN_RECEP_F1_2; 1.
KW G-protein coupled receptor; Glycoprotein; Lipoprotein; Palmitate;
Phosphorylation; Transmembrane.
DOMAIN 1 40 Extracellular (Potential).
TRANSMEM 41 62 1 (Potential).
DOMAIN 63 74 Cytoplasmic (Potential).
TRANSMEM 75 95 2 (Potential).
DOMAIN 96 115 Extracellular (Potential).
TRANSMEM 116 137 3 (Potential).
DOMAIN 138 157 Cytoplasmic (Potential).
TRANSMEM 158 178 4 (Potential).
DOMAIN 179 210 Extracellular (Potential).
TRANSMEM 211 232 5 (Potential).
DOMAIN 233 368 Cytoplasmic (Potential).
TRANSMEM 369 391 6 (Potential).
DOMAIN 392 404 Extracellular (Potential).
TRANSMEM 405 428 7 (Potential).
DOMAIN 429 446 Cytoplasmic (Potential).
FT CARBOHYD 10 10 N-linked (GlcNAc...) (Potential).
```

[21] "A receptor subtype involved in neuropeptide-Y-induced food intake." ;
 Brancsek I.A., Weinszauk R.L., Lebel L., Lebel L., Lebel L., Lebel L.,
 Nature 382:168-171(1996).
 [22] SEQUENCE OF 12-456 FROM N.A.
 TTSU=Brain;
 MEDLINE 98332165; Pubmed=9669502; DOI=10.1016/S0014-2999(98)00171-X;
 PARKER E.M., Babji C.K., Balasubramaniam A., Burrier R.E., Guzzi M.,
 Hamud F., Mukhopadhyay G., Rudinski M.S., Tao Z., Tice M., Xia L.,
 Mullins D.E., Salisbury B.G.;

Db 68 MGNTLILMAVMKRNQKTTNFIENLGNLAFSDILVFLFCSPTLTSLVLLQWFMFGKAMCHI 127
 QY 127 MPFLQCVSLVETLILISTAIYRYHMKIPISNNITANHGYELIATVTLGFAICSPPLPV 186
 Db 128 MPFLQCVSLVETLILISTAIYRYHMKIPISNNITANHGYELIATVTLGFAICSPPLPV 187
 QY 187 FHSVLQVETLILISTAIYRYHMKIPISNNITANHGYELIATVTLGFAICSPPLPV 246
 Db 188 FHSVLQVETLILISTAIYRYHMKIPISNNITANHGYELIATVTLGFAICSPPLPV 247
 QY 247 STSCGLSKENLEENEMINLTHPSKSGPOVKLSGSHKWSYSPFKHRRYSKTKTACV 306
 Db 248 STSCGLSKENLEENEMINLTHPSKSGPOVKLSGSHKWSYSPFKHRRYSKTKTACV 307
 QY 307 LPAPRRPSHNSRILPENFGSVRSQSSSKFIPGVPTCPRIKPEENS DVHVLKRSV 366
 Db 308 LPAPAGPSGCKHLAV-PENPASVRQLSPSSKVFVGFVCFVKEESDAHEMRKRSI 366
 QY 367 TRIKRSRVFRLTILILVFAVSWMLHLFHVVDTFDNDNLISNRHFKLVYICHLGWM 426
 Db 367 TRIKRSRVFRLTILILVFAVSWMLHLFHVVDTFDNDNLISNRHFKLVYICHLGWM 426
 QY 427 SCCLNPILYGLNNGIQRDLQ 447
 Db 427 SCCLNPILYGLNNGIKADLR 447

RESULT 6

NY5R_MOUSE
 ID NY5R_MOUSE STANDARD; PRT: 466 AA.
 AC O70342; O35380; O9JMK1;
 DT 15-DEC-1998 (Rel. 37, Created)
 DT 16-OCT-2001 (Rel. 40, Last sequence update)
 DT 25-OCT-2004 (Rel. 45, Last annotation update)
 DE Neuropeptide Y receptor type 5 (NPY5-R) (NPY-Y5 receptor) (Y5 receptor).
 DE receptor.
 GN Name=Npy5r; Synonyms=Npy5;
 OS Mus musculus (Mouse).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
 OX NCBI_TaxID=10090;
 [1]
 RP SEQUENCE FROM N.A.
 RX MEDLINE=99017379; PubMed=98023393; DOI=10.1016/S0167-0115(98)00052-4;
 RA Borowsky B., Walker M.W., Bard J., Weinschank R.L., Laz T.M.,
 RA Vaysses P., Branchek T.A., Gerald C.;
 RT "Molecular biology and pharmacology of multiple NPY Y5 receptor species homologs."
 RL Regul. Pept. 75:45-53 (1998).
 RN [2]
 RP SEQUENCE FROM N.A.
 RC STRAIN=129/Sv; TISSUE=Brain;
 RA Chen H., Adams S., McWhinnie E., Bayne M., Gadeki R., Zastawny R.;
 RT "Mouse neuropeptide Y Y5 receptor characterized by repeat sequence in extracellular domain."
 RL Submitted (SEP-1997) to the EMBL/GenBank/DBJ databases.
 RN [3]
 RP SEQUENCE FROM N.A.
 RX MEDLINE=97459646; PubMed=9315606; DOI=10.1016/S0005-2736(97)00131-4;
 RA Nakamura M., Yokoyama M., Watanabe H., Matsumoto T.;
 RT "Molecular cloning, organization and localization of the gene for the mouse neuropeptide Y-Y5 receptor."
 RL Biochim. Biophys. Acta 1328:83-89 (1997).
 CC -!- FUNCTION: Receptor for neuropeptide Y and peptide YY. The activity of this receptor is mediated by G proteins that inhibit adenylate cyclase activity. Seems to be associated with food intake. Could be involved in feeding disorders (By similarity).
 CC -!- SUBCELLULAR LOCATION: Integral membrane protein.
 CC -!- SIMILARITY: Belongs to the G-protein coupled receptor 1 family.
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 CC EMBL; AF049329; AAC17839.1; -
 CC EMBL; AF022948; AAB81829.1; -
 CC EMBL; AB001346; BAA89538.1; -
 CC MGD; MGI:108082; Npy5r
 CC GO; GO:0016020; C:membrane; IDA.
 CC GO; GO:0001602; F:pancreatic polypeptide receptor activity; IDA.
 CC GO; GO:0001601; F:peptide YY receptor activity; IDA.
 CC GO; GO:0007273; P:regulation of synapse; IMP.
 CC InterPro; IPR000276; GPCR_Rhodpsn.
 CC InterPro; IPR000393; NPY5_receptor.
 CC InterPro; IPR000611; NPY_receptor.
 CC Pfam; PF00001; 7cm_1; 1.
 CC PRINTS; PR00237; GPCR_HODOPSIN.
 CC PROSITE; PS00237; G_PROTEIN_RECP_F1_1; FALSE_NEG.
 CC PROSITE; PS0262; G_PROTEIN_RECP_F1_2; 1.
 KW G-protein coupled receptor; Glycoprotein; Lipoprotein; Palmitate; Phosphorylation; Transmembrane.
 FT DOMAIN 1 61 Extracellular (Potential).
 FT TRANSMEM 62 83 1 (Potential).
 FT DOMAIN 84 95 Cytoplasmic (Potential).
 FT TRANSMEM 96 116 2 (Potential).
 FT DOMAIN 117 136 Extracellular (Potential).
 FT TRANSMEM 137 158 3 (Potential).
 FT DOMAIN 159 178 Cytoplasmic (Potential).
 FT TRANSMEM 179 199 4 (Potential).
 FT DOMAIN 200 231 Extracellular (Potential).
 FT TRANSMEM 232 253 5 (Potential).
 FT DOMAIN 254 388 Cytoplasmic (Potential).
 FT TRANSMEM 389 411 6 (Potential).
 FT DOMAIN 412 424 Extracellular (Potential).
 FT TRANSMEM 425 448 7 (Potential).
 FT DOMAIN 449 466 Cytoplasmic (Potential).
 FT DISULFID 135 219 By similarity.
 FT LIPID 462 462 S-palmitoyl cysteine (Potential).
 FT CARBOHYD 10 10 N-linked (GLCNAc...) (Potential).
 FT CARBOHYD 17 17 N-linked (GLCNAc...) (Potential).
 FT CARBOHYD 38 38 N-linked (GLCNAc...) (Potential).
 FT CARBOHYD 39 39 N-linked (GLCNAc...) (Potential).
 FT CONFLICT 195 195 L -> F (in Ref. 1).
 FT CONFLICT 284 284 K -> Q (in Ref. 3).
 SQ SEQUENCE 466 AA; 52784 MW; B157F236EF2D4385 CRC64;
 Query Match 77.3%; Score 2022; DB 1; Length 466;
 Best Local Similarity 84.7%; Pred. NO. 4.4e-127;
 Matches 388; Conservative 24; Mismatches 24; Indels 22; Gaps 2;
 QY 11 MDLELDYNYKTLATENTTAAT-----RNSDFPVWDDYKSSVDD 49
 Db 1 MEVKLEEHFNKTFVTENNTAASQNTASPAWEDYRGTEENTTAARNTAFPVWEDYRGSVDD 60
 QY 50 LQYFLIGLYTFVSLGFMGNLILMALMKRNQKTTNVNFLGNLAFSDILVFLFCSPTLT 109
 Db 61 LQYFLIGLYTFVSLGFMGNLILMALMKRNQKTTNVNFLGNLAFSDILVFLFCSPTLT 120
 QY 110 TSVLLDQWFMFGKAMCHIMPFLQCVSLVSTLILISIAIVRYHMKIPISNNITANHGYEL 169
 Db 121 TSVLLDQWFMFGKAMCHIMPFLQCVSLVSTLILISIAIVRYHMKIPISNNITANHGYEL 180
 QY 170 IATVTLGFAICSPPLPVPHSLVELQFTFGSALLSSRYLCVSWFSDSVRIAFITSLLLVQ 229
 Db 181 IATVTLGFAICSPPLPVPHSLVELKTFGSAALLSSRYLCVSWFSDSVRIAFITSLLLVQ 240
 QY 230 YILPLVCLTVSHTSVCSISGLSKENRLEENEMINLTHPSKSGPOVKLSGSHKWSY 289
 Db 241 YILPLVCLTVSHTSVCSISGLSKENRLEENEMINLTHPSKSGPOVKLSGSHKWSY 300
 QY 290 SFIKHHRRYSKTKACVLPAPERPSQENHSHILPENFGSVRSQSSSKFIPGVPTCFEI 349

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Db 301 SPIKRRYRSKTKACVLPAPAGPSQKHLTV-PENPGSVRSQSLSKVPKGVPICEV 359
QY 350 KPEENSVDHVLKRSVTRIKRSRSVYRLTILILVFAVSWMPHLFHVHVTDFNDNLIS 409
Db 360 KPEESDAQEMVRKSLTRIKRSRSVYRLTILILVFAVSWMPHLFHVHVTDFNDNLIS 419
QY 410 NRHFKLVCYICHLGMSCCCLNPILYGLNNGIQRDILQ 447
Db 420 NRHFKLVCYICHLGMSCCCLNPILYGLNNGIKADLR 457

RESULT 7
NY5R_PIG
AC O97969; STANDARD; PRT; 446 AA.
DT 30-MAY-2000 (Rel. 39, Created)
DT 30-MAY-2000 (Rel. 39, Last sequence update)
DT 25-OCT-2004 (Rel. 45, Last annotation update)
DE Neuropeptide Y receptor type 5 (NPY5-R) (NPY-Y5 receptor) (Y5
DE receptor).
GN Name=NPY5R; Synonyms=NPYR5;
OS Sus scrofa (pig).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Cetartiodactyla; Suina; Suidae; Sus.
OX NCBI_TaxID=9823;
RN [1]
RP SEQUENCE FROM N.A.
RA Wraith A., Tornsten A., Chardon P., Harbitz I., Chowdhary B.P.,
RA Andersson L., Larhammar D.;
RT "Porcine NPY receptors NPY1R, NPY2R and NPY5R: cloning, mapping and
RT comparative analysis.";
RL Submitted (NOV-1998) to the EMBL/GenBank/DBJ databases.
RN [2]
RP SEQUENCE FROM N.A.
RC STRAIN=LMD; TISSUE=Kidney;
RA Ito Y., Minezawa M.;
RT "Sus scrofa gene for neuropeptide Y receptor type 5, complete cds.";
RL Submitted (OCT-1998) to the EMBL/GenBank/DBJ databases.
CC -!- FUNCTION: Receptor for neuropeptide Y and peptide YY. The activity
CC of this receptor is mediated by G proteins that inhibit adenylate
CC cyclase activity. Seems to be associated with food intake. Could
CC be involved in feeding disorders (By similarity).
CC -!- SUBCELLULAR LOCATION: Integral membrane protein.
CC -!- SIMILARITY: Belongs to the G-protein coupled receptor 1 family.
CC
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CC or send an email to license@isb-sib.ch).
CC
CC EMBL; AF106083; AAD13778.1; -.
CC EMBL; AB019185; BAA34055.1; -.
CC InterPro; IPR000276; GPCR_Rhodpsn.
CC InterPro; IPR000393; NPY5_receptor.
CC InterPro; IPR000611; NPY_receptor.
CC Pfam; PF00001; 7tm_1; 1.
CC PRINTS; PR00237; GPCRHHODPSN.
CC PROSITE; PS00237; G_PROTEIN_RECEP_F1_1; FALSE_NEG.
CC PROSITE; PS0262; G_PROTEIN_RECEP_F1_2; 1.
CC G-protein coupled receptor; Glycoprotein; Lipoprotein; Palmitate;
CC phosphorylation; Transmembrane.
KW DOMAIN 1 40 Extracellular (Potential).
FT TRANSMEM 41 62 1 (Potential).
FT DOMAIN 63 74 Cytoplasmic (Potential).
FT TRANSMEM 75 95 2 (Potential).
FT DOMAIN 96 115 Extracellular (Potential).
FT TRANSMEM 116 137 3 (Potential).
FT DOMAIN 138 157 Cytoplasmic (Potential).
FT TRANSMEM 158 178 4 (Potential).
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FT DOMAIN 179 210 Extracellular (Potential).
FT TRANSMEM 211 232 5 (Potential).
FT DOMAIN 233 368 Cytoplasmic (Potential).
FT TRANSMEM 369 391 6 (Potential).
FT DOMAIN 392 404 Extracellular (Potential).
FT TRANSMEM 405 428 7 (Potential).
FT DOMAIN 429 446 Cytoplasmic (Potential).
FT CARBOHYD 10 10 N-linked (GlcNAc...) (Potential).
FT CARBOHYD 17 17 N-linked (GlcNAc...) (Potential).
FT DISULFID 114 198 By similarity.
FT LIPID 442 442 S-palmitoyl cysteine (Potential).
SQ SEQUENCE 446 AA; 50474 MW; B7F616C2394C6CA0 CRC64;

Query Match 75.5%; Score 1976; DB 1; Length 446;
Best local Similarity 85.1%; Pred. fo. 5e-124;
Matches 371; Conservative 33; Mismatches 32; Indels 0; Gaps 0;

QY 11 MDLEDEYNNKTLATENNTAATRNDSF PVWDDYKSSVDDLDQYFLIGLYTFVSLGFMGNL 70
Db 1 MGSEIPDYNNKTLASENNVATRNDSF PVWEDYKGSVDDLDQYFLIGLYTFVSLGFMGNL 60
QY 71 LILMALMKRRNQKTTVNFIGNLAFSI ILVVLFCSPFTLTSVLLDQWMEGKVMCHIMPFL 130
Db 61 LILMAVMKRRNQKTTVNFIGNLAFSI ILVVLFCSPFTLTSVLLDQWMEGKVMCHIMPFL 120
QY 131 QCVSVLSTLILISIAIVRYHMKHPV SNLNTANHGYPFIATVWTGLGFAICSLPVPFHSL 190
Db 121 QCVTVLSTLILISIAIVRYHMKHPV SNLNTANHGYPFIATVWTGLGFAICSLPVPFHSL 180
QY 191 VELQETFGSALLSSRYLCVESWPSDSYRIAFITSLILVOYILPLVCLTVSHTSVCSRIS 250
Db 181 VELQESFGSALLSSRYLCVESWPSDSYRIAFITSLILVOYILPLVCLTVSHTSVCSRIS 240
QY 251 GLSNKENRLEENEMINLTLPKSGQF QVKLSGSHKWSYFIKHKRRRYSKKTACVLPAP 310
Db 241 GLSSQDSKLEENEMINLTLPKRSQF QAKLSHHPKWTYSFIRHRRRYSKKTACVLPAP 300
QY 311 ERPSQENHSRIILPENFGSVRSQSSSKETPGVPTCFEIKPENSVDHVLKRSVTRIK 370
Db 301 AGALSERGRPGKVGSMQSPPPSKFMPGVPTCFEVKPEENSVDPEMRVSRIMRUR 360
QY 371 KRSRSVYRLTILILVFAVSWMPHLFHVHVTDFNDNLISNRHFKLVCYICHLGMSCCCL 430
Db 361 KRSRSVYRLTILILVFAVSWMPHLFHVHVTDFNDNLISNRHFKLVCYICHLGMSCCCL 420
QY 431 NPILYGLNNGIQRDIL 446
Db 421 NPILYGLNNGIKADLR 436

RESULT 8
Q8QFM2 PRELIMINARY; PRT; 443 AA.
ID Q8QFM2 AC Q8QFM2;
DT 01-JUN-2002 (TrEMBLrel. 21, Created)
DT 01-JUN-2002 (TrEMBLrel. 21, Last sequence update)
DT 01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
DE Neuropeptide Y receptor Y5.
OS Gallus gallus (Chicken).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Archosauria; Aves; Neognathae; Galliformes; Phasianidae; Phasianinae;
OC Gallus.
OX NCBI_TaxID=9031;
RN [1]
RP SEQUENCE FROM N.A.
RA Holmberg S.K.S., Mikko S., Boswell T., Zoorob R., Larhammar D.;
RT "Pharmacological characterization of cloned chicken neuropeptide Y
RT receptors Y1 and Y5.";
RL J. Neurochem. 0:0-0(2003).
DR EMBL; AY040844; RAK83556.1; -.
DR GO; GO:0016021; C:integral to membrane; IEA.
DR GO; GO:0004983; F:neuropeptide Y receptor activity; IEA.
DR GO; GO:0004872; F:receptor activity; IEA.
```

DR GO: 0001584; F: rhodopsin-like receptor activity; IEA.
DR GO: 0007218; P: neuropeptide signaling pathway; IEA.
DR InterPro: IPR000276; GPCR Rhodopsin.
DR InterPro: IPR000393; NPY5_receptor.
DR InterPro: IPR000611; NPY_receptor.
DR Pfam: PF00001; 7tm1.1.
DR PRINTS: PR00237; GPCRHHODOPSIN.
DR PRINTS: PR01016; NRPEPTIDEYR.
DR PROSITE: PS00262; G_PROTEIN_RECP_F1_2; 1.
KW Neuropeptide; Receptor.
SQ SEQUENCE 443 AA; 50044 MW; EF99F1A391CC092E CRC64;

Query Match 61.3%; Score 1603.5; DB 2; Length 443;
Best Local Similarity 68.7%; Pred. No. 3.8e-99;
Matches 305; Conservative 51; Mismatches 83; Indels 5; Gaps 4;

QY 11 MDLELDYNNKLTATNTAATRNDDPPWDDYKSSVDVDFGLYFLGLTYFVSLFGMNL 70
Db 1 MDLGFQDYNT-PTKNTSATTKN--FSAWEDYKSSVDVDFGLYFLGLTYFVSLFGMNL 57

QY 71 LITLMAKMKRNOKTWNFLIGNLAFSDILVLFCSPPFTLTSLVLLDQWFMGKVMCHMPEPL 130
Db 58 LVLTAL-TKRQKXTIINILGNLAFSDILVLFCSPPFTLTSLVLLDQWFMGKVMCHMPEPL 116

QY 131 QCVSVLSTLILISIAIVRYHMKHPISNNLTANHGYFLIATVWTLGFALCSPLFVHSL 190
Db 117 QCTSVLSTLILISIAAVRYRMVKYPLSNLTAKHGYFLIIVAVGCAICSPFLVFHKL 176

QY 191 VELQTFGSALLSSRYLCSWPSDSYRIAFITISLLVQYILPLVCLTVSHTSVCRSTSC 250
Db 177 VDLHKLTLLEALENLLCTESWPSDSYRIAFITISLLVQYILPLVCLTVSHTSVCRSTSC 236

QY 251 GLSNKENLEENMNLTHPSKSGSQVQLSGSHKWSYFLLKHRRYSKKTACVLAP 310
Db 237 RLSSKEGFQENMNLTHPSKSGTGAQPSHTSWSCALVRKHRRYSKKTSTVMPAI 296

QY 311 ERPSQENHRILPENFGSVRSQSSSKFIPGVPTCFEIKPEENSDVHE-LRVKRSVTRI 369
Db 297 LRQQQDAFRLD.PETSGTEKQSSSKSFIPGVPTCFEIKPEENSDVHE-LRVKRSVTRI 356

QY 370 KRSRSVYRITLILVFAVSMPLHFLHVDFNDNLISNRHFKLVYICICHLGMMGCC 429
Db 357 KTRSRVFCRLTVLTVFGFSWMLHFLHVDFNDNLISNRHFKLVYICICHLGMMGCC 416

QY 430 LNPILYGLNNGIQDLOFFENFC 453
Db 417 LNPILYGLNNSIKADLSLIPCC 440

RESULT 9
NY1R HUMAN
ID NY1R HUMAN STANDARD; PRT; 384 AA.
AC P25929;
DT 01-MAY-1992 (Rel. 22, Created)
DT 01-MAY-1992 (Rel. 22, Last sequence update)
DT 25-OCT-2004 (Rel. 45, Last annotation update)
DE Neuropeptide Y receptor type 1 (NPY1-R).
GN Name=NPY1R; Synonyms=NPYR, NPY1;
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX NCBI_TaxID=9606;
RN [1]
RP SEQUENCE FROM N.A.
RC TISSUE=Brain;
RA MEDLINE=92283782; PubMed=1317848;
RA Lathammer D., Blomqvist A.G., Yee F., Jazin E.E., Yoo H.,
RA Wahlestedt C.R.;
RT "Cloning and functional expression of a human neuropeptide Y/peptide
RT Y receptor of the Y1 type."
RL J. Biol. Chem. 267:10935-10938(1992).
RN [2]

RP SEQUENCE FROM N.A.
RC TISSUE=Brain;
RX MEDLINE=92335184; PubMed=1321422;
RA Herzog H., Hort Y.J., Ball H.J., Hayes G., Shine J., Selbie L.A.;
RT "Cloned human neuropeptide Y receptor couples to two different second
RT messenger systems."
RL Proc. Natl. Acad. Sci. U.S.A. 89:5794-5798(1992).
RN [3]
RP SEQUENCE FROM N.A.
RC TISSUE=Blood;
RX MEDLINE=93203272; PubMed=8095935;
RA Herzog H., Baumgartner M., Vivero C., Selbie L.A., Auer B., Shine J.;
RT "Genomic organization, localization, and allelic differences in the
RT gene for the human neuropeptide Y Y1 receptor."
RL J. Biol. Chem. 268:6703-6707(1993).
RN [4]
RP SEQUENCE FROM N.A.
RC TISSUE=Testis;
RX MEDLINE=22389257; PubMed=12477932; DOI=10.1073/pnas.242603899;
RA Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,
RA Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,
RA Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
RA Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,
RA Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,
RA Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,
RA Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C.,
RA Raba S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,
RA Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,
RA Richards D., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
RA Villalón D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,
RA Fahey J., Helton E., Kettman M., Madan A., Rodrigues S., Sanchez A.,
RA Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,
RA Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,
RA Rodriguez A.C., Greenwood J., Schmutz J., Myers R.M.,
RA Butcherfield V.S.N., Krzywinski M.I., Skalska U., Smalhus D.E.,
RA Schnerch A., Schein J.E., Jones S.J.M., Marra M.A.;
RT "Generation and initial analysis of more than 15,000 full-length human
RT and mouse cDNA sequences."
RL Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).
CC -!- FUNCTION: Receptor for neuropeptide Y and peptide YY. The rank
CC order of affinity of this receptor for pancreatic polypeptides is
CC NPY > [Pro-34] PYY, PYY and [Leu-31, Pro-34] NPY > NPY (2-36) >
CC [Ile-31, Gln-34] PP and PYY (3-36) > PP > NPY free acid.
CC -!- SUBCELLULAR LOCATION: Integral membrane protein.
CC -!- SIMILARITY: Belongs to the G-protein coupled receptor 1 family.
CC -----
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CC -----
CC EMBL; M88461; AAA73215.1; -;
CC EMBL; M84755; AAA59920.1; -;
CC EMBL; L07614; -; NOT ANNOTATED_CDS.
CC EMBL; L07615; AAA59947.1; -;
CC EMBL; BC036657; AAH36657.1; -;
CC EMBL; A26481; CAA01819.1; -;
CC EMBL; A26126; CAA01787.1; -;
CC PIR; A45490; A45490.
CC Genew; HGNC:7956; NPY1R.
CC MIM; 162641; -;
CC GO; GO:0005887; C: integral to plasma membrane; TAS.
CC GO; GO:0004983; F: neuropeptide Y receptor activity; TAS.
CC GO; GO:0007193; P: G-protein signaling, adenylate cyclase inh. . .; TAS.
CC GO; GO:0007187; P: G-protein signaling, coupled to cyclic nucl. . .; TAS.
CC InterPro; IPR000276; GPCR_Rhodopsin.
CC InterPro; IPR000351; NPY1_Receptor.
CC InterPro; IPR000611; NPY_Receptor.
CC Pfam; PF00001; 7tm1.1;
CC PRINTS; PR00237; GPCRHHODOPSIN.

```

DR PROSITE; PS00237; G_PROTEIN_RECP_F1_1; 1.
DR PROSITE; PS0262; G_PROTEIN_RECP_F1_2; 1.
KW G-protein coupled receptor; Glycoprotein; Lipoprotein; Palmitate;
KW Phosphorylation; Polymorphism; Transmembrane.
FT DOMAIN 1 39 Extracellular (Potential).
FT TRANSMEM 40 62 1 (Potential).
FT DOMAIN 63 72 Cytoplasmic (Potential).
FT TRANSMEM 73 94 2 (Potential).
FT DOMAIN 95 114 Extracellular (Potential).
FT TRANSMEM 115 136 3 (Potential).
FT DOMAIN 137 156 Cytoplasmic (Potential).
FT TRANSMEM 157 177 4 (Potential).
FT DOMAIN 178 210 Extracellular (Potential).
FT TRANSMEM 211 232 5 (Potential).
FT DOMAIN 233 263 Cytoplasmic (Potential).
FT TRANSMEM 264 286 6 (Potential).
FT DOMAIN 287 299 Extracellular (Potential).
FT TRANSMEM 300 323 7 (Potential).
FT DOMAIN 324 384 Cytoplasmic (Potential).
FT CARBOHYD 2 2 N-linked (GlcNAc. . .) (Potential).
FT CARBOHYD 11 11 N-linked (GlcNAc. . .) (Potential).
FT CARBOHYD 17 17 N-linked (GlcNAc. . .) (Potential).
FT DISULFID 113 198 By similarity.
FT LIPID 338 374 S-palmitoyl cysteine (Potential).
FT VARIANT 374 374 K -> T (in dbSNP:5578).
FT CONFLICT 96 96 F -> L (in Ref. 2).
SQ SEQUENCE 384 AA; 44392 MW; 582B0DD804490316 CRC64;

* Query Match
Best Local Similarity 29.5%; Score 771.5; DB 1; Length 384;
Matches 170; Conservative 75; Mismatches 128; Indels 117; Gaps 8;

Qy 20 NKTLL--ATENNTA----ATRNDFPVWDDYKSSVDDLOQYFLIGL-YTFVSLGFMGNLLI 72
Db 2 NSTLFSQVENHSHSNFSEKNAQLAFENDCHLPLAMIFTLALAYGAVIILGVSGNAL 61
Qy 73 LMALMKKRNQKTYNFIIGNLAFSDILVLFCSPTLTSLVLLDQWFGKVMCHIMPFLQC 132
Db 62 IILIKQKMRNVNIIIVNLFSDDLVAIMCLPFTFYTLMDHWFGEMCKLNPFVQC 121
Qy 133 VSVLSTLILISIAIVRYHMIKHPISNNLTANHGFLIATVTLGFAICSPLPVPHSLVE 192
Db 122 VSIIVSIFSLVLAVERHQLIINPRGWRPNRHAYGLAVIWL--AVASSLPFLIYQVM 179
Qy 193 LQETFGSALLSS----RYLCVESWPSDSYRTAFTISLLVQYILPLVCLTWSHTSVCRSIS 249
Db 180 TDEPFQNVTLDAYKDKYVCFQFSDSHRLSYTTLLVQLQYFGPLCFIFCYFKI----- 234
Qy 250 CGLSKENRLEENEMINLTLPSSKSGPQVKLSGSHKWSYFIIKHRRYSKKTACVLP 309
Db 235 -----YILKRR----- 241
Qy 310 PERPSQENHSRILPENFGSVRSQSSSKFTPGVPTCFEIKPENSDVHELVRKRSVTRI 369
Db 242 -----NNWMDKMRDNKYSSE 257
Qy 370 KGRSRVYRLTILILVFAVSWMLHLPHVYVDFDNDNLISNRHFKLYVCYCHLLGWSMCC 429
Db 258 TKR---INIMLLSTVAVAFACWLPETFTNTVFDWNHQIATCNHLLFLCHLTAMISTC 314
Qy 430 LNPILYGLNNGIQDLOFFNFCDFRSRDDDIYETIAMSTMTHTDVSATSLKQASPVAFKK 489
Db 315 VNPIFYGLNKNFQDLOFFNFCDFRSRDDDIYETIAMSTMTHTDVSATSLKQASPVAFKK 374
Qy 490 INNDDNEKI 499
Db 375 INNDDNEKI 384

RESULT 10
NYLR_CANFA
ID NYLR_CANFA STANDARD; PRT; 382 AA.

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AC 002813;
DT 15-JUL-1998 (Rel. 36, Created)
DT 15-DEC-1998 (Rel. 37, Last sequence update)
DT 25-OCT-2004 (Rel. 45, Last annotation update)
DE Neuropeptide Y receptor type 1 (NPY.-R).
GN Name=NPY1R;
OS Canis familiaris (Dog).
OC Eukaryota; Metazoa; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Carnivora; Fissipedia; Canidae; Canis.
OX NCBI_TaxID=9615;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=99017380; PubMed=9802394; DOI=10.1016/S0167-0115(98)00053-6;
RA Malmstrom R.E., Hoekfelt T., Bjoerlman J.-A., Nihlen C., Bystrom M.,
RA Ekstrand A.J., Lundberg J.M.;
RT "Characterization and molecular cloning of vascular neuropeptide Y
receptor subtypes in pig and dog.";
RL Regul. Pept. 75:55-70(1998).
CC -!- FUNCTION: Receptor for neuropeptide Y and peptide YY.
CC -!- SUBCELLULAR LOCATION: Integral membrane protein.
CC -!- SIMILARITY: Belongs to the G-protein coupled receptor 1 family.
CC
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CC
CC EMBL; AF005778; AAC08046.1; -.
DR InterPro; IPR000276; GPCR_Rhodpsn.
DR InterPro; IPR000351; NPY1_receptor.
DR InterPro; IPR000611; NPY_Receptor.
DR Pfam; PF00001; 7tm1; 1.
DR PRINTS; PR00237; GPCR_RHODOPSIN.
DR PROSITE; PS00237; G_PROTEIN_RECP_F1_1; 1.
DR PROSITE; PS0262; G_PROTEIN_RECP_F2_1; 1.
KW G-protein coupled receptor; Glycoprotein; Lipoprotein; Palmitate;
KW Phosphorylation; Transmembrane.
FT DOMAIN 1 38 Extracellular (Potential).
FT TRANSMEM 39 61 1 (Potential).
FT DOMAIN 62 71 Cytoplasmic (Potential).
FT TRANSMEM 72 93 2 (Potential).
FT DOMAIN 94 113 Extracellular (Potential).
FT TRANSMEM 114 135 3 (Potential).
FT DOMAIN 136 155 Cytoplasmic (Potential).
FT TRANSMEM 156 176 4 (Potential).
FT DOMAIN 177 209 Extracellular (Potential).
FT TRANSMEM 210 231 5 (Potential).
FT DOMAIN 232 262 Cytoplasmic (Potential).
FT TRANSMEM 263 285 6 (Potential).
FT DOMAIN 286 298 7 (Potential).
FT TRANSMEM 299 322 Cytoplasmic (Potential).
FT DOMAIN 323 382 N-linked (GlcNAc. . .) (Potential).
FT CARBOHYD 11 11 N-linked (GlcNAc. . .) (Potential).
FT CARBOHYD 17 17 N-linked (GlcNAc. . .) (Potential).
FT CARBOHYD 185 185 N-linked (GlcNAc. . .) (Potential).
FT DISULFID 112 197 By similarity.
FT LIPID 337 337 S-palmitoyl cysteine (Potential).
SQ SEQUENCE 382 AA; 44245 MW; 95B57D20D6299803 CRC64;

Query Match
Best Local Similarity 29.1%; Score 761; DB 1; Length 382;
Matches 167; Conservative 69; Mismatches 124; Indels 112; Gaps 7;

Qy 32 TRNSDFPVWDDYKSSVDDLOQYFLIGL-YTFVSLGFMGNLLIILMALMKRNQKTYNFI 90
Db 19 SENSQFLAFESDDCHLPLAMIFTLALAYGAVIILGVTLGNLALIMILKQKMRNVNII 78
Qy 91 GNLAFLDILVLFCSPTLTSLVLLDQWFGKVMCHIMPFLQCVSLVSTLILISIAIVRY 150

```

Db 79 VNLSPDLLVAIMCLPFTFVYVTLMDHWFGEAMKLNPFVQCVSITVSIFSLVIAVERH 138
Qy 151 HMKIPIGNLTANHYFLIATVTLGFAICSPVLFHSLVELQETFGSALLSS---RYL 207
Db 139 QLIINPRGWRPNRHHAYVIAVWL--AVSSLFPLVQLVUTDPPQNVTLDAFKIV 196
Qy 208 CVESWPSDSYRIAFITISLLVQYILPLVCLTVSHTSVCSISGSLSKENRLEENMINL 267
Db 197 CDFKPPSDSHRLSYTLLMLQYFGPLCFIFCYFKI----- 233
Qy 268 TLHPSKSGPQVKSLSHWSYFVFKHRRYSKKTACVLPAPERPSQENHRIILPENFG 327
Db 234 -----YRLKRR----- 240
Qy 328 SVRSQSSSKFIPGVTCTFEIKPEENSDVHELVRKRSVTRIKRSGVYRLTILILVF 387
Db 241 -----NNMDKRDKNYRSSETR---INIMLSIVVAF 271
Qy 388 AVSMPLHLFHVVDNDNLISNRHFKLYCICHLGMMSCCLNPILYGLNNGIQRLQ 447
Db 272 AVCMLPLTIFNTVDMNHQIATCNHLLFLCHLTAMISTCVNPIFYGLNKNFQRLQ 331
Qy 448 FFFNCDPSRDDYETIAMSTMHTDVSKTSLKQASPVAFKKINNDNEKI 499
Db 332 FFFNCDPSRDDYETIAMSTMHTDVSKTSLKQASPVAFKKI--NNDDNEKI 382

RESULT 11
Q9GK75 PRELIMINARY; PRT; 383 AA.
ID Q9GK75 AC Q9GK75
DT 01-MAR-2001 (TremBLrel. 16, Created)
DT 01-MAR-2001 (TremBLrel. 16, Last sequence update)
DT 01-JUN-2003 (TremBLrel. 24, Last annotation update)
DE Neuropeptide Y receptor Y1.
OS Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Cercopitheciidae;
OC Cercopitheciinae; Macaca.
OX NCBI_TaxID=9544;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=21184974; PubMed=11287088; DOI=10.1016/S0196-9781(01)00336-9;
RA Gehlert D.R., Yang P., George C., Wang Y., Schober D.,
RA Gackenheimer S., Johnson D., Beavers L.S., Gadski R.A., Baez M.:
RT "Cloning and characterization of Rhesus monkey neuropeptide Y receptor
RT subtypes(1).";
RL Peptides 22:343-350(2001).
CC -1- SUBCELLULAR LOCATION: Integral membrane protein (By similarity).
CC -1- SIMILARITY: Belongs to family 1 of G-protein coupled receptors.
DR EMBL; AF303089; AAG40771.1; -
DR GO; GO:0016021; C:integral to membrane; IEA.
DR GO; GO:0004983; F:neuropeptide Y receptor activity; IEA.
DR GO; GO:0004872; F:receptor activity; IEA.
DR GO; GO:0001584; F:rhodopsin-like receptor activity; IEA.
DR GO; GO:0007218; P:neuropeptide signaling pathway; IEA.
DR InterPro; IPR000276; GPCR_Rhodopsn.
DR InterPro; IPR000351; NPY1_receptor.
DR Pfam; PF00001; 7tm_1; 1.
DR PRINTS; PR00237; GPCR_RHODOPSIN.
DR PRINTS; PR01013; NRPEPTIDEV1.
DR PRINTS; PR01012; NRPEPTIDEV1.
DR PROSITE; PS00237; G_PROTEIN_RCEP_F1_1; 1.
DR PROSITE; PS02662; G_PROTEIN_RCEP_F1_2; 1.
KW G-protein coupled receptor; Neuropeptide; Receptor; Transmembrane.
SQ SEQUENCE 383 AA; 44305 MW; F872C45AA90DF62A CRC64;

Query Match 28.7%; Score 752; DB 2; Length 383;
Best Local Similarity 34.3%; Pred. No. 2.5e-42;
Matches 168; Conservative 76; Mismatches 128; Indels 118; Gaps 9;

Qy 20 NKTLL--ATENNTA----ATRNSDFPVMDYKSSVDDQLQYFLIGL-YTFVSLLGFGNLLI 72

Db 2 NSTLFSOVENHSVSNPSEKNAQLAPENDCHLPLAMIFTLALAYGAVIILGVGNLAL 61
Qy 73 LMALMKKNQKTTNVLNGLNLAFLSDILVVLFCSPFTLTSLVDQWMEKVMCHMPLQOC 132
Db 62 IILILQKEMENVTNIIILVNLFSDDLVAIMCLPFTFVYVTLMDHWFGEAMKLNPFVOC 121
Qy 133 VSVLSTLILISIAIVRYHMIKHPISNNLTANHGVFILATVMTLGFACISPLPVPHSLVE 192
Db 122 VSIIVSIFSLVLLAVERHQLIINPRGWRPNRHHAYVIAVWL--AVASSLPFLIYQVM 179
Qy 193 LQETFGSALLSS---RYLCVESWPSDSYRIAFITISLLVQYILPLVCLTVSHTSVCSIS 249
Db 180 TDEPFQNVTLDAYKDKVCFQFSDSHRLSYTLLMLQYFGPLCFIFCYFKI----- 234
Qy 250 CGLSKENRLEENMINLTHPSKSGPQVKSLSHWSYFVFKHRRYSKKTACVLP 309
Db 235 -----YRLKRR----- 241
Qy 310 PERPSQENHRIILPENFGSVRSQSSSKFIPGVTCTFEIKPEENSDVHELVRKRSVTRI 369
Db 242 -----NNMDKRDKNYRSSE 257
Qy 370 KKRSGSVYRLTILILVFAVSMPLHLFHVVDNDNLISNRHFKLYCICHLGMMSCC 429
Db 258 TKR---INIMLSIIVAFVAVCWLPLTIFNTVDMNHQIATCNHLLFLCHLTAMISTC 314
Qy 430 LNPILYGLNNGIQRLQFNFCDPSRDDYETIAMSTMHTDVSKTSLKQASPVAFKK 489
Db 315 VNPIFYGLNKNFQRLQFNFCDPSRDDYETIAMSTMHTDVSKTSLKQASPVAFKK 374
Qy 490 INNDDNEKI 499
Db 375 I--NNDDNERI 383

RESULT 12
ID NY1R_RAT STANDARD; PRT; 382 AA.
AC P21555;
DT 01-MAY-1991 (Rel. 18, Created)
DT 01-MAY-1992 (Rel. 22, Last sequence update)
DT 25-OCT-2004 (Rel. 45, Last annotation update)
DE Neuropeptide Y receptor type 1 (NPY1-R) (FC5).
GN Name=Npy1r;
OS Rattus norvegicus (Rat).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.
OX NCBI_TaxID=10116;
RN [1]
RP SEQUENCE FROM N.A.
RC TISSUE=Brain;
RX MEDLINE=91032093; PubMed=2172008; DOI=10.1016/0014-5793(90)80377-U;
RA Eva C., Keinaenen K., Monyer H., Seeburg P.H., Sprengel R.;
RT "Molecular cloning of a novel G protein-coupled receptor that may
RT belong to the neuropeptide receptor family.";
RL FEBS Lett. 271:81-84(1990).
RN [2]
RP REVISIONS, AND FUNCTION.
RC TISSUE=Brain;
RA Krause J.E., Eva C., Seeburg P.H., Sprengel R.;
RL Submitted (NOV-1991) to the EMBL/GenBank/DBJ databases.
CC -1- FUNCTION: Receptor for neuropeptide Y and peptide YY.
CC -1- SUBCELLULAR LOCATION: Integral membrane protein.
CC -1- TISSUE SPECIFICITY: Brain.
CC -1- SIMILARITY: Belongs to the G-protein coupled receptor 1 family.
CC -----
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CC	EMBL; Z11504; CAA77579.1; --	Db	370 AFKISMN-DNEKI 382
DR	PIR; S12863; S12863.	RESULT 13	
DR	RGD; 3198; Npy1r.	NY1R_PIG	STANDARD; PRT; 383 AA.
DR	InterPro; IPR000276; GPCR_Rhodopsn.	AC	O02835;
DR	InterPro; IPR000351; NPY1_receptor.	DT	15-JUL-1998 (Rel. 36, Created)
DR	InterPro; IPR000611; NPY_receptor.	DT	15-JUL-1999 (Rel. 38, Last sequence update)
DR	Pfam; PF00001; 7tm.1; 1.	DT	25-OCT-2004 (Rel. 45, Last annotation update)
DR	PRINTS; PR00237; GPCRHHODOPS.	DE	Neuropeptide Y receptor type 1 (NPY..-R).
DR	PROSITE; PS00237; G_PROTEIN_REC_F1_1; 1.	GN	Name=NPY1R;
DR	PROSITE; PS00262; G_PROTEIN_REC_F1_2; 1.	OS	Sus scrofa (Pig).
DR	G-protein coupled receptor; Glycoprotein; Lipoprotein; Palmitate;	OC	Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
KW	phosphorylation; Transmembrane.	OC	Mammalia; Eutheria; Cetartiodactyla Suina; Suidae; Sus.
FT	DOMAIN 1 38	OX	NCBI_TaxID=9823;
FT	TRANSMEM 39 61	RN	[1]
FT	DOMAIN 62 71	RP	SEQUENCE FROM N.A.
FT	TRANSMEM 72 93	RC	TISSUE=Hypothalamus;
FT	DOMAIN 94 113	RX	MDLLINE=99017380; PubMed=9802394; DOI=10.1016/S0167-0115(98)00053-6;
FT	TRANSMEM 114 135	RA	Malmstroem R.E.; Hoekfelt T.; Bjoerkman J.-A.; Nihlen C.; Bystroem M.,
FT	DOMAIN 136 155	RA	Ekstrand A.J.; Lundberg J.M.;
FT	TRANSMEM 156 176	RT	"Characterization and molecular cloning of vascular neuropeptide Y
FT	DOMAIN 177 209	RT	receptor subtypes in pig and dog.";
FT	TRANSMEM 210 231	RL	Regul. Pept. 75:55-70(1998).
FT	DOMAIN 232 262	RN	[2]
FT	TRANSMEM 263 285	RP	SEQUENCE FROM N.A.
FT	DOMAIN 286 298	RA	Wraith A., Tornsten A., Chardon P., Harbitz I., Chowdhary B.P.,
FT	TRANSMEM 299 322	RA	Andersson L., Larhammar D.;
FT	DOMAIN 323 382	RT	"Porcine NPY receptors NPY1R, NPY2R and NPY5R: cloning, mapping and
ET	CARBOHYD 2 2	RT	comparative analysis.";
ET	CARBOHYD 11 11	RL	Submitted (NOV-1999) to the EMBL/GenBank/DBJ databases.
FT	CARBOHYD 17 17	CC	-1- FUNCTION: Receptor for neuropeptide Y and peptide YY.
FT	DISULFID 112 197	CC	-1- SUBCELLULAR LOCATION: Integral membrane protein.
FT	LIPID 337 337	CC	-1- SIMILARITY: Belongs to the G-protein coupled receptor 1 family.
SQ	SEQUENCE 382 AA; 44116 MW; 1D6AA038065C07C3 CRC64;	CC	
Query Match		CC	This SWISS-PROT entry is copyright. It is produced through a collaboration
Best Local Similarity		CC	between the Swiss Institute of Bioinformatics and the EMBL outstation -
Matches 166; Conservative 74; Mismatches 127; Indels 127; Gaps 10;		CC	the European Bioinformatics Institute. There are no restrictions on its
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		CC	or send an email to license@sib-sib.ch).
QY	20 NKT1--ATENNTA---ATRNDFPVDYKSSVDDQVFLIGLYTF-----VSLGFMG 68	CC	EMBL; AF005779; AAC26836.1; --
Db	2 NSTLFSRVNYSVHNVSNSPFLAFEN-----DDCHLPLAVITFLALAYGAVILGVSG 56	DR	EMBL; AF106081; AAD13776.2; --
QY	69 NLLILMALMKRNOKTTNFIIGNLAFSDIILVLFCSPTLTSLVLLQWFGKVMCHMP 128	DR	InterPro; IPR000276; GPCR_Rhodopsn.
Db	57 NLALIIILKQKEMRNVTNIIIVNLSFSDLLVAVMCLPFTFVYTIMDHWVFGETMCKLNP 116	DR	InterPro; IPR000351; NPY1_receptor.
QY	129 FLOCVSLVSTLILISIAIVRYHMKHPISNNLTANHGFIATVWTILGPAICSPLPVFH 188	DR	Pfam; PF00001; 7tm.1; 1.
Db	117 FVQCVSITVSIFSLVLAVERHQLINPRWRPNRHHAYIGITVIWLVAVASSLPFFVIYQ 176	DR	PRINTS; PR00237; GPCRHHODOPS.
QY	189 SLVELQETFGSALLSS---RYLCVESWPSDYRIAFTISLLVQYILPVLCLTVSHTSVC 245	DR	PROSITE; PS00237; G_PROTEIN_REC_F1_1; 1.
Db	177 ILTD--EPPQNVSLAFAFKDKVCFPSDSHRLSYTTLLLVQVFGPLCFIFCYFKI- 233	DR	PROSITE; PS00262; G_PROTEIN_REC_F1_2; 1.
QY	246 RSISGLSNKENLEENEMINLTLPSSKSGPQVKSLSHWSVFIKRRRRYSKKTAC 305	KW	G-protein coupled receptor; Glycoprotein; Lipoprotein; Palmitate;
Db	234 -----YRLKRNMMMDK----- 246	FT	phosphorylation; Transmembrane.
QY	306 VLPAPERPSQENHSRLPENFGSVRSQSSSKFTIPGVPTCFEIKPENSDVHELVRKRS 365	FT	DOMAIN 1 39
Db	247 -----IRDSKVRSE----- 256	FT	TRANSMEM 40 62
QY	366 VTRIKRSRVFYRLITILVFAVSWMPLHLFHVVTDFNDNLINRHPKLVYVCCHLGM 425	FT	DOMAIN 63 72
Db	257 -----TKRINVMLSIWAFAVCMWPLTITFTVFDWNHQIATCNHNLFLCHLTAM 309	FT	TRANSMEM 73 94
QY	426 MSCCLNPILYGLNNGIORDLOPFENFCDFSRDDYETIAMSTWHTDVSKTSLKQASPV 485	FT	DOMAIN 95 114
Db	310 ISTCVNPIFYGLNKNKFNQLOFFNFCDFRSRDDYETIAMSTWHTDVSKTSLKQASPV 369	FT	TRANSMEM 115 136
QY	486 AFKINNNDDNEKI 499	FT	DOMAIN 137 156
		FT	TRANSMEM 157 177
		FT	DOMAIN 178 210
		FT	TRANSMEM 211 232
		FT	DOMAIN 233 263
		FT	TRANSMEM 264 286
		FT	DOMAIN 287 299
		FT	TRANSMEM 300 323
		FT	DOMAIN 324 383
		FT	CARBOHYD 2 2
		FT	CARBOHYD 11 11

FT	CARBOHYD	17	17	N-linked (GlcNAc...)	(Potential).
FT	DISULFID	113	198	By similarity.	
FT	LIPID	338	338	S-palmitoyl cysteine	(Potential).
FT	CONFLICT	203	203	L -> P (in Ref. 2).	
SQ	SEQUENCE	383 AA	44327 MW	OD58CBACAS49B62CF CRC64;	
Query Match					
Best Local Similarity		28.3%;	Score 740;	DB 1;	Length 383;
Matches 167;		Conservative 79;	Mismatches 126;	Indels 118;	Gaps 9;
QY	20	NKTLAT--ENNTA----	ATRSDFPVDYKSSVDDQLYFLGL-YTFVSLGFGWNLII	72	
Db	2	NSTLSSQVENHIYNFSEKNSQFLAFENDCHLPLAMIFTLALAYGAVIILGVSGNLAL	61		
QY	73	LMALMKGNQKQTVNPLGNLAFSDILVLFCSPTFLTSVLDDQWFGKVMCHIMPFQOC	132		
Db	62	IIIIILKQEMRNVTLLIIVNLSFSDLLVAIMCLPTFFVYTLMDHVFGEVCKLAPFVQC	121		
QY	133	VSVLTLLISIAIVRHIMKIPISNNLTANHGYFLIATVMTLGAICSPLPVFHSLVE	192		
Db	122	VSITVIFSLVLAVERHQLIINPRGRPSNRHAYVGIIVWL--AVASSLPFLIYQVL	179		
QY	193	LOETGSGALLS---RYLCVESWPSDVRIATISILLVOYLPLVCLTVSHTSVCRSIS	249		
Db	180	TDEPQNTVLDAPKDKYVCDFKPLSDSHRLSYTTLVLLVQYFGPLCFIFCYFKI----	234		
QY	250	COLSNKENRLEBENMINLTHPSKSGQVGLSGHKSYSPIKCHRRYSKKTACVLPA	309		
Db	235	-----YIRLKR-----	241		
QY	310	PERPSQENHSRILPNFGSVRSLSKSPFGVPTCFEIKPEENSVDHELRKRSVTRI	369		
Db	242	-----NNWMDKMRDNKYSRS	257		
QY	370	KKRSRVFRLTILILVFAVSWPLHLFHVVTDFNDNLISNRHFKLVYVICIHLGWSCC	429		
Db	258	TKR-----INVLLSIIVAVAVCVLPTIFTVFDMHQAIIATCNHLLFLLCHLTAMITC	314		
QY	430	LNPILYGLNNGIQDLOFFNFCDFRSRDDDYETIAMSTHTDYSKTSKQASVAFKK	489		
Db	315	INPIFYGLNKNFQDLOFFNFCDFRSRDDDYETIAMSTHTDYSKTSKQASVAFKK	374		
QY	490	INNDDNEKI	499		
Db	375	I-HSDDNEKI	383		
RESULT 14					
ID	NY1R_MOUSE	STANDARD;	PRT;	382 AA.	
AC	Q04573;	O61993;			
DT	01-OCT-1993	(Rel. 27, Created)			
DT	01-OCT-1993	(Rel. 27, Last sequence update)			
PT	25-OCT-2004	(Rel. 45, Last annotation update)			
DE	Neuropeptide Y receptor type 1 (NPY1-R).				
GN	Name=Npy1r;				
OS	Mus musculus (Mouse).				
OC	Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;				
OC	Mammalia; Eutheria; Rodentia; Sclerognathi; Muridae; Murinae; Mus.				
OK	NCBI_TaxID=10090;				
RN	(1)				
RP	SEQUENCE FROM N.A.				
RC	TISSUE=Liver;				
RX	MEDLINE=93106169; PubMed=1468559; DOI=10.1016/0014-5793(92)81490-D;				
RA	Eva C., Obero A., Sprengel R., Genazzani E.,				
RT	"The murine NPY-1 receptor gene. Structure and delineation of tissue-				
RT	specific expression."				
RL	FEBS Lett. 314:285-288(1992).				
RP	(2)				
RP	SEQUENCE FROM N.A.				
RX	MEDLINE=96102072; PubMed=8530415; DOI=10.1074/jbc.270.50.30102;				
RA	Nakamura M., Sakanaka C., Aoki Y., Ogasawara H., Tsuji T., Kodama H.,				
RA	Matsumoto T., Shimizu T., Noma M.;				

"Identification of two isoforms of mouse neuropeptide Y-Y1 receptor generated by alternative splicing. Isolation, genomic structure, and functional expression of the receptors.";
J. Biol. Chem. 270:30102-30110(1995).
CC -!- FUNCTION: Receptor for neuropeptide Y and peptide YY.
CC -!- SUBCELLULAR LOCATION: Integral membrane protein.
CC -!- ALTERNATIVE PRODUCTS:
CC Name=NPY1-R alpha; Sequence=Displayed;
CC IsoId=Q04573-1; Sequence=Displayed;
CC Name=NPY1-R beta;
CC IsoId=Q04573-2; Sequence=VSP_001912, VSP_001913;
CC -!- TISSUE SPECIFICITY: The alpha form is highly expressed in the brain, heart, kidney, spleen, skeletal muscle, and lung, whereas the beta receptor mRNA was not detected in these tissues. However, the beta form is expressed in mouse embryonic developmental stage (7 and 11 days), bone marrow cells and several hematopoietic cell lines.
CC -!- DEVELOPMENTAL STAGE: The beta form is expressed in embryonic development stage (7 and 11 days). The beta form is an embryonic and a bone marrow form of NPY1-R, which decreases in the expression during development and differentiation.
CC -!- SIMILARITY: Belongs to the G-protein coupled receptor 1 family.

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DR EMBL; Z18280; CAA79157.1; -;
DR EMBL; Z18281; -; NOT ANNOTATED_CDS.
DR EMBL; D63818; BAA09887.1; -;
DR EMBL; D63819; BAA09888.1; -;
DR PIR; S27388; S27388.
DR MGI; 104963; Npy1r.
DR GO; GO:0001602; P:pancreatic polypeptide receptor activity; IDA.
DR GO; GO:0001601; P:peptide YY receptor activity; IDA.
DR GO; GO:0007631; P:feeding behavior; IMP.
DR GO; GO:0006006; P:glucose metabolism; IMP.
DR GO; GO:0007626; P:locomotory behavior; IMP.
DR GO; GO:0019233; P:perception of pain; IMP.
DR GO; GO:0008217; P:regulation of blood pressure; IMP.
DR GO; GO:0040014; P:regulation of body size; IMP.
DR InterPro; IPR000276; GPCR_Rhodpsn.
DR InterPro; IPR000351; NPY1_receptor.
DR InterPro; IPR000611; NPY_receptor.
DR Pfam; PF00001; 7tm1.1; 1.
DR PRINTS; PR00237; GPCR_RHODOPSIN.
DR PROSITE; PS00237; G_PROTEIN_RECP_F1_1; 1.
DR PROSITE; PS0262; G_PROTEIN_RECP_F1_2; 1.
KW Alternative splicing; G-protein coupled receptor; Glycoprotein; Lipoprotein; Palmitate; Phosphorylation; Transmembrane.
FT DOMAIN 1 38 Extracellular (Potential).
FT TRANSMEM 39 61 1 (Potential).
FT DOMAIN 62 71 Cytoplasmic (Potential).
FT TRANSMEM 72 93 2 (Potential).
FT DOMAIN 94 113 Extracellular (Potential).
FT TRANSMEM 114 135 3 (Potential).
FT DOMAIN 136 155 Cytoplasmic (Potential).
FT TRANSMEM 156 176 4 (Potential).
FT DOMAIN 177 209 Extracellular (Potential).
FT TRANSMEM 210 231 5 (Potential).
FT DOMAIN 232 262 Cytoplasmic (Potential).
FT TRANSMEM 263 285 6 (Potential).
FT DOMAIN 286 298 Extracellular (Potential).
FT TRANSMEM 299 322 7 (Potential).
FT DOMAIN 323 382 Cytoplasmic (Potential).
FT CARBOHYD 2 2 N-linked (GlcNAc...) (Potential).
FT CARBOHYD 11 11 N-linked (GlcNAc...) (Potential).
FT CARBOHYD 17 17 N-linked (GlcNAc...) (Potential).

Search completed: June 7, 2005, 17:58:44
Job time : 182 secs

